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## ORIGINAL ARTICLES.

### THE LIMITATIONS OF REST IN THE TREATMENT OF TRAUMATA.\*

By FRANK J. LUTZ, M. D., St. Louis.

Nothing has had a greater influence upon surgical practice than John Hunter's epoch making generalization: "The first and great requisite for the restoration of injured parts is rest."<sup>†</sup>

For the dissemination of the Hunterian maxim the popular work of Hilton on "Rest and Pain," with which every practitioner of medicine is familiar, has been the most successful agent.

Let me quote from Furneaux Jordan, *Surgical Enquiries* (London, J. & A. Churchill): "Rest is a remedy so necessary as a foundation to all other treatment that it can only be regarded as an evidence of the slow progress of therapeutics that it should have been left to a surgeon of the nineteenth century (Mr. Hilton) to enforce its universal need."

Like many of the supposed canons of surgery, this maxim of rest after

injuries is gradually and steadily undergoing a review as our knowledge of the physiologic and anatomic changes which are associated with injury are being modified in the light of more recent experience in the laboratory and at the bedside.

The fundamental changes which have occurred in our knowledge of tissue and function disturbance following injuries, and the changes which we group under the inherited name of inflammation, have greatly influenced practice. Repair of injuries is a physiological process. Traumatism, unless so destructive of tissue as to result in necrosis, are followed by such physiological reaction as will repair the damage done and restore the changed function, and unless infection occurs traumata, whether resulting in contusion of the more highly organized structures or of those of lower vitality or in open wounds, are not followed by inflammation. Hence the reparative process and inflammation are distinct and separate processes, although they may coexist and

\* Read before the Missouri State Medical Association, Excelsior Springs, May, 1905.

<sup>†</sup> John Hunter. A treatise on the blood, inflammation and gunshot wounds. Philadelphia, 1817, p. 185.

necessarily modify treatment. Both processes—the reparative as well as the inflammatory process—are beneficially influenced by imitating in practice what nature attempts to do, namely, to place the tissues, structures and organs into such relationship to the organism as a whole as to enable them to recover from the disturbance inflicted upon them.

By rest, or, if you will, by immobilization, or by limiting mechanically or therapeutically normal functions for a time, we pattern our treatment after nature's example. In carrying out this idea of limiting function in cases of injury the profession has gradually drifted into a groove narrow and contracting until in many instances immobilization and rest are the only local therapeutic measures which are instituted.

Against this practice it is my intention to direct these brief remarks. I realize that the consideration of such apparently elementary things is not the order of the day, but I believe that for every-day work you and I can get more out of the discussion of a subject in which all of us are practically equally skillful, and in which most of us have had some experience, and such a discussion, whether had in public or whether it gives one food for thought and suggestions for practice, will result in good to ourselves as physicians and will keep many of our patients out of the hands of those who, although ignorant of the science of surgery, draw to themselves a large clientele which should in the nature of things come under the supervision of the medical profession, because, however ignorantly these pretenders apply physiological prin-

ciples, they apply them, and those of us whose training should have taught them differently, sit idly by and in the comforting belief that we are letting nature take her course, we are really constantly interfering with her in her efforts at speedy restoration.

If you will analyze your own experience you will concur in the conclusion that in very many instances too much rest is given because of the fear that the swelling usually observed and the pain associated with the injury are the manifestations of beginning inflammation, which will be increased unless the structures were kept quiet, and which might result in permanent disability. Now, the truth is that unless an injury is associated with an open wound, it is not influenced for the worse by immediate manipulation nor by the use of the part. Let us take as an illustration a simple fracture. Its diagnosis when the long bones are affected can, as a rule, be readily made. Having determined the site and direction of the fracture, if the latter be at all taken into consideration, the more perfect the reduction and the more perfect the apposition of the fragments the better satisfied is the attending medical man, and he directs his entire therapeutics to keeping the fragments in apposition. He next gives attention to the pain, which is supposedly in proportion to the mobility of the fragments. The surgeon who obtains perfect apposition and immobility and makes his patient comfortable flatters himself that he has, and is generally supposed to have, accomplished everything that need be accomplished for the time being. His



immobilizing apparatus immediately and properly applied and anodynes ordered *pro re nata* is, as a rule, the limit of the attendant's activity.

Now let us consider what are the conditions of the limb recently fractured: First, there is swelling of the limb at and around the site of injury, which follows in its spread the loose intermuscular connective tissue and fasciæ. In the next place there is more or less pain brought about by any attempt at voluntary movement. The swelling or tumefaction is due to the injury of blood vessels of the bone or of those lying near the site of fracture and torn by the same violence which broke the bone. Hence there is extravasation of blood into the soft parts and extravasation of serum from the lacerated tissues in the neighborhood of the fracture. This blood and serum extravasation constitutes the first swelling. Other circulatory changes, however, tend to augment the swelling and to have it continue for a long time. The most important of these is the venous stagnation in the limb which has been fractured. I need only mention it to recall to you the elementary fact of physiology that muscular contraction and relaxation acting upon the veins are the most potent factors in keeping up venous circulation. When for any reason the muscles do not perform their physiological function in a case of injury the chief cause of the venous flow does not act, the veins become engorged; they relieve themselves, it is true, partially by transudation of serum into the soft parts, but the arterial flow continuing, the engorgement of the limb and transudation continues and increases. The effect

of this venous stasis in the limb means interference with its nutritive changes, for the exhausted blood is detained and cannot perform its physiological function. The reactions between the blood and the tissues are interfered with, hence the vitality of the limb becomes lowered, and hence its power of initiating and sustaining the reparative changes is diminished.

Now, how much can be gained in establishing the process of repair when the limb is in the condition above described by simply bringing the fractured ends into proper apposition? How will successful reparative action be initiated? What can be accomplished until the local tumefaction and the extravasated blood and the blood stasis have been removed? We would not think of substituting for the normal physiological intermittent muscular contraction voluntary muscular action, but should find some substitute and this substitute is best represented by effective manual pressure so directed as to empty the distended veins of their contents and the connective tissue of the transudation which has been poured into it.

We begin the manipulations necessary for the accomplishment of this purpose on the proximal side of the injury, because the proximity of healthy tissue enables the transudation to be absorbed the more readily, and the relief of the proximal portion of the swelling will bring relief to the more distal parts. The unloading of the vessels and lymph spaces will at once remove the feeling of heaviness and throbbing and will make the patient comfortable, so much so that the at first much dreaded "rubbing" will be gratefully welcomed. After

the first artificial stimulation to the circulation, and to the removal of the transudations, which should be done immediately after the trauma has been inflicted, a light immobilizing apparatus, applied *secundum artem*, should support the limb. The application of the splint should not, however, exclude the application of artificial stimulation. In fact, it should be continued at intervals of twenty-four hours, so long as swelling remains—swelling due to effusion. When the tumefaction has subsided the splint should remain permanently applied until the repair of the soft parts and the bone has been accomplished—usually a relatively shorter time than when immobilization alone has been practiced from the beginning.

I have not the temerity to prolixly detail what is more familiar to you than to me in the application of splints, their occasional removal for purposes of inspection as to the contour of the limb, or the correction of deviations. But let us pass on to the consideration of the limb after the usual immobile encasement has been removed. Two things stare us annoyingly in the face—atrophy of the member and muscular debility. The leg or arm is wasted, the fat has disappeared, the muscles have become atrophic from non use, they are incapable of performing their function. If after weeks of strenuous effort the muscles begin to resume their office, they are soon exhausted and their contraction causes pain—a condition but very slowly recovered from and in exaggerated instances never. This is the condition usually

encountered, and it is the condition most difficult to overcome.

It suggests itself, therefore, that an early return to muscular movements will prevent muscular wasting. By this I do not intend to advocate muscular movements of the limb by the surgeon or attendant—the so-called “passive motion;” that is, as is well known, an impossible kind of movement except when the patient is anesthetized. I rather refer to those voluntary movements made by the patient under the direction and guidance of his surgeon, even before consolidation of the fracture has occurred. The splint encasing the limb is removed or opened if an influence upon the patient’s mind must be made and he is asked to move the different muscles. His efforts, at first timid, because of the supposed pain from which he will suffer, soon become more bold, and after a few trials it will be found that he moves them easily and painlessly.

As Wharton P. Hood has pointed out, “The Treatment of Injuries by Friction and Movement,” “all muscular effort that is excessive for the muscle performing it is attended and followed by perfectly harmless pain;” and “every slight or ordinary effort is excessive for a muscle that is flabby or wasted from disuse.”

If the prolonged enforcement of rest acts detrimentally in cases of fractures, the picture is the more pronounced in traumata involving joints.

In a dislocation, the first object to be attained is to reduce it, and then our efforts are directed to the preservation of the mobility of the joint. Does it seem reasonable to sacrifice its

mobility first by disuse through immobility or rest? No one would be so foolhardy as to incur the risk of renewed displacement by movements calculated to dislodge the bone, but all other movements tend only to promote the absorption of the effused blood and lymph. whether these fluids have found their way into the joint itself or into the surrounding structures.

And lastly as to sprains—Here the same indications are to be met. First, the prevention of the formation of adhesions due to the organization of the extravasated blood or the effused lymph; and, secondly, the preservation of the muscles from the wasting incident to non use. The former is accomplished by friction; the latter by the performance of the natural functions of the joint. Upon rubbing, mechanical support and exercise rests the successful treatment of this most obstinate of all injuries to joints or their neighborhood. To encase the sprained joint in an immovable splint will secure "rest," but it will also be followed by a wasted limb and a painful joint, and recovery will be so long deferred that the popular opinion is well founded that "a sprain is worse than a break."

I have thus hastily sketched the conditions in the treatment of which we most often sin by the establishment of prolonged rest, leaving it to others to discuss the tendency to initiate an early return to physiological functioning; as, for example, in permitting patients upon whom surgical procedures have been instituted for abdominal thoracic and cerebral injuries and diseases to arise as soon as the surgical wound has healed.

I cannot, however, in conclusion refrain from calling your attention to the fact that unwittingly we become participants in prolonging the period of responsibility in cases in which claims are made for the payment of damages.

Let me summarize:

Contrary to the accepted practice, early and continued use of injured parts tends to prevent adhesions and muscular wasting. Both of these conditions cause disability prolonged beyond the time necessary for nature to repair the injury.

#### DISCUSSION.

Dr. H. M. Grace, of Chillicothe: One of the greatest advantages in getting patients up soon after injuries is not only that the circulation is affected by the exercise, but there is the value of open air and sunshine. I was taught that when called to see a patient after such an injury that I must keep him absolutely quiet. Often we put the patient into a dark room in order to better keep him quiet, and when we removed the splints, we found the muscles atrophied and the circulation interfered with, and sometimes the patient was in pretty bad condition. On the other hand if we allow those patients to go out into the open air the general condition is greatly improved. Another thing, I was taught that when the parts were put in apposition we were to leave them there and that in three weeks we would find them united, but we have often been badly disappointed. Sometimes the parts are not united at all, and then we rub the fractured ends together to get a better circulation. If we had



kept up massage we would have had a better result. Again we think the limb is straight and when we take off the splint we find it is not straight, but it is firmly united. Now, I make it a rule to take off my splints once a week, and if the limb is not perfectly straight I put it straight. We make a mistake when we go to see our patients and only look at the outside of the splints. Fowler in his abdominal work made one of the greatest strides in the world when he advised his patients to sit up early, or to be propped up in bed. When I went to school, a patient, after an appendectomy, was kept in bed for three weeks. Now we see patients up and traveling to distant parts of the country in a week's time. Women, after hysterectomies, were kept in bed for six weeks, but now we have them get up much earlier and stir about, and they are much better for it.

Dr. M. B. Clopton, St. Louis: I would certainly agree with any man who urged close attention to fractures and the early use of parts about the bone. Some years ago a French surgeon, Lucas-Championniere, directed attention to the value of massage about the soft parts around the fracture. He used no splints to confine the parts, but watched the case carefully, using sand bags and other appliances to maintain position. The use of splints does away with the anxiety that one must necessarily feel when relying upon such insecure supports as he used. In the treatment of sprains early use is essential. I remember cases that I saw in which it seemed impossible for the men to use the joints; the pa-

tients were football players, and it seemed probable that they would be laid up for weeks. Adhesive plaster was used to immobilize them and they were sent home with that dressing, and in a few days we found them back in a hard game. You save five or six weeks in the treatment of a sprain if you can get the patient on his feet within twenty-four hours. If there is very much muscle spasm there must be a very much firmer dressing than adhesive plaster, and a light plaster dressing for twenty-four hours about the ankle will be sufficient to start the patient off with an adhesive plaster dressing. In Colles' fracture treated with plaster of paris the most distressing results have occurred because the dressing was not removed every three or four days. More ischæmic palsies have occurred from the compression of the muscles of the forearm in a plaster dressing in the treatment of Colles' fracture than in any other form of treatment.

Dr. L. A. Fulton, Kansas City: I would lay emphasis upon two points not mentioned in the discussion, first regarding early passive motion in cases of fracture I cannot find language too strong to condemn early passive motion in fracture. Even when the fracture is firmly united I doubt the advisability of motion inside of four weeks. Keep your splints on and let it alone. Another point in these conditions: I believe there is nothing to match irrigation, especially if there is tumefaction. Elevate the limb, and, if necessary, use an antiseptic solution; if not, then use merely hot water. Nothing will give greater relief than constant hot water

irrigation at 110° for twenty-four or forty-eight hours, if necessary. It makes the contused parts look like a washerwoman's hands. It will, many times, save amputation of a limb.

Dr. C. H. Wallace, St. Joseph: This especially interests me, as my railroad connection has given me considerable work along this line. I am especially interested in the point touched on, that the old practice has been too long immobilization in many injuries, but the pendulum is likely to swing too far the other way and motion commenced in certain cases before it should. This is a matter where the judgment of the surgeon and the conditions of the patient must be the guiding factor. There are many fractures especially of the long bones where we may maintain coaptation without confinement of the part for an extended period.

We should make an effort to strike a middle ground in these cases and put on splints and maintain coaptation, at the same time secure a certain amount of motion to the limb. For instance in Pott's fracture, we believe the patient should not be confined longer than a fortnight or after the inflammatory condition has subsided. Consequent improvement of the general condition incident to fresh air and exercise is an important element in early restoration. After a week or ten days we turn these patients out of doors and per-

mit a little motion of the limb every day with a plaster support that maintains coaptation, and they will recover within a third of the time that they would have done with the old method of absolute rest and confinement in the house for six weeks.

As to the dressing in Colles' fracture, I maintain that a Colles' fracture after it has been reduced will retain its position without a dressing. The only dressing needed is a support of the distal and for the relief of pain. The bad results so often seen in these cases frequently come from the effort of reduction without the use of an anesthetic, the consequence being non-reduction and permanent deformity and impairment of function.

Dr. A. W. McAlester, of Columbia: The subject should interest every general practitioner. The great point brought out in Dr. Lutz' paper was, that venous obstruction prevented normal cell growth, retarded union, as in case of fractures, predisposed tissue to inflammatory changes, permitting them to disintegrate by implantation of bacterial life. That when this venous circulation was retarded by whatever means was applicable to a given condition, normal cell production would take place. The fracture alluded to by Dr. Lutz was merely to illustrate the great principle, leaving the practitioner to widen the range.

## A CASE OF ABSCESS OF THE PLACENTAL SITE.\*

BY E. W. SAUNDERS, M. D., of St. Louis.

In the year 1890 I was engaged to attend Mrs. R. in her first confinement. The gestation showed nothing abnormal except that it was prolonged for two weeks beyond the expected date. There had been no serious illness either before or after the marriage, and no suspicion of an infection of the pelvic organs. Labor progressed slowly until dilatation was sufficient for the application of the forceps. At that time it was noticed that the pulse was too rapid, and that the temperature had risen to 100.5°. There was a very disagreeable odor which became noticeable about the time of the rupture of the membranes. The child was very large, and as soon as it became evident that there was no progress I decided to apply the forceps. I sent for Dr. P. G. Robinson, who noticed the bad odor before he made an examination. The child was living. On bringing the head down, extension did not occur. Dr. Robinson called to me, "Make extension," but it required my best endeavors to bring the occiput up against the arch. The pains were very vigorous. I soon discovered the explanation for the lack of extension—the child was dead, and every muscle was rigid with a preternatural rigor mortis.

We estimated the weight of the infant to be between twelve and fourteen pounds. There was very little laceration of the soft parts. The placenta was expelled almost immediately, and with it came a rush of pus

mingled with the blood, the odor of which almost sickened us. The uterus contracted well, and there was no hemorrhage.

Within a few minutes the patient had a most violent chill, with cyanosis, and the pulse rate was so high that it was difficult to record it. The temperature rose rapidly to 104°, if I remember correctly. We examined the placenta, which came away entire, and found a space which had evidently formed part of the boundary wall of an abscess cavity.

My theory was that the abscess was primarily tubal, eventually encroaching upon the cornu. However, there had never been in her case a suspicion of pyosalpinx.

The case pursued a severely septic and prolonged course, eventuating in recovery. There was extensive plastic exudation in the pelvis, which was finally absorbed. Pyelitis was the last complication that arose.

Retro-placental abscess seems to be a rare complication of labor. In the current literature of that day I succeeded in finding only one case which tallied completely with mine in all respects, except that it terminated fatally at an early day.

To my friend Dr. B. W. Moore I am indebted for valuable assistance in the research of the literature up to the present time.

The obstetrical literature of the earlier part of the last century contains a fairly abundant number of references to inflammatory changes in the placenta. Thus, Sir James Simpson distinguished three stages

\*Read before the St. Louis Obstetrical and Gynecological Society, May 11, 1905.



of placentitis: first, that of serous effusion; second, that of fibrinous exudate; and third, that of purulent effusion. Among others, Seanzoni, Hegar, Marie and Schroeder accepted this classification. But a more careful study of placental abnormalities in recent times has shown that the changes which were formerly attributed to inflammatory processes are, in reality, due to infarct formation, either white or red, or to the presence of cysts whose grumous contents were mistaken for pus.

A hasty review of recent literature would seem to show that purulent inflammation of the placenta is extremely rare. A few of the current treatises on obstetrics contain references to the condition. Williams recognizes the possibility of inflammation of the maternal portion of the placenta from a pre-existing inflammatory condition of the endometrium, or by extension from the Fallopian tube, and has observed in several instances, in examining placental tissue under the microscope, a characteristic appearance of acute inflammation.

Von Franque observed similar changes, but believed them to be secondary to the death of the foetus. Recently Goldspohn reported in this city a case of hyperemesis gravidarum, in which pregnancy was interrupted at three and a half months, and in which there was a circular, purulent infiltration of the placenta, the size of a quarter, emitting a foul odor. No bacteriological examination was made. He quotes a case of Jardine, and two of Ludwig Pick's, from Schauta's clinic, in which a similar condition was found, post-mortem.

Schroeder, in his treatise, mentions a case of retroplacental abscess observed by Bouschert. Liell, some years ago, observed a somewhat similar condition. The patient had pyosalpinx, which emptied into the uterus during or after labor. Both mother and child survived.

#### DISCUSSION.

Dr. Glasgow said that it had never been his fortune to find a case exactly like the first, namely, abscess on the placenta. He had seen a case like the second one. The patient was about eight months pregnant and had some slight fever. The child was born all right. Next day the temperature was 104°. Washing out the uterus did absolutely no good, showing that there was no infection originating in the uterine cavity. He then drained it with a hard rubber tube, and the patient got well and had better health than she had enjoyed for years. He had used these hard rubber tubes a long time, and they were very satisfactory. He put it into the fundus, and everything drained away perfectly. He had never had a case die of sepsis after labor, and he didn't think they ought to die, if attended to properly early before infection became established outside of the uterine cavity.

Dr. Robert M. Funkhouser had never had a case of abscess of the placenta. But as the doctor had mentioned a case of pus coming from a pus tube it reminded him of a case that he had heard of recently. A good deal of bad smelling pus had come away after the birth of the child. This was undoubtedly from a pus tube. The pus had welled out with

the afterbirth. There was every evidence that the patient had a salpingitis, but she was well at the present time.

Dr. Elbrecht said that as Dr. Saunders thought there was a possibility of this pus having arisen from a pus tube, he wanted to mention a case that had come under his observation about a year ago. The patient, a colored woman, had been delivered of twins, a normal delivery in every way, and thirty-six hours later died of acute peritonitis before he could operate. At autopsy he found that she had a double pyosalpinx and one tube was ruptured, which had given rise to the acute peritonitis. Gonococci were found in the pus. Both the babies lived. It was the only case he knew of in which double pus tubes existed with pregnancy. The one which had ruptured was about the size of a walnut. There were few adhesions.

Dr. Saunders asked Dr. Elbrecht if he thought these might not have developed after conception.

Dr. Elbrecht replied that he supposed the pus tube had existed on one side when pregnancy occurred, and that the infection had traveled around to the other side. He did not think the tube was ruptured by labor, but most probably through the use of Crede's method. The pressure used to express the placenta would be sufficient to easily rupture a thin walled pus tube.

Dr. L. E. Newman thought it strange that the patient had not developed a temperature during pregnancy and no signs during the six weeks preceding labor. He judged that the abscess cavity held in the neighborhood of a pint of pus, enough

to certainly make the odor very noticeable before the delivery of the placenta. He asked Dr. Saunders if the child was alive.

Dr. Saunders replied that he had heard the fetal heart beat. The rate was pretty rapid, but there was nothing that had aroused his fears for the child. When born it was tetanized with the stiffest muscles he had ever seen.

Replying to a question by the president, he said that the abscess had been centrally located rather than near the margin, and that there was no evidence of an old clot having undergone putrefaction.

Dr. Crossen thought that if the condition came from a salpingitis there should have been a history of some previous disturbance.

Dr. Saunders stated that the patient might have had some disturbance, but there was no mention of any. This was her first child.

Dr. Crossen said the more rational explanation would be an infarct with subsequent infection.

The president, referring to Dr. Glasgow's remarks as to the drainage of pus tubes, said he had reported two or three years ago a case of extreme puerperal sepsis, which had developed after the woman had apparently gotten well. She was taken with a hard chill, temperature running up to 106°, and he found the left tube as large as a goose egg. She had been perfectly normal for four or five days when this occurred. During puerperal sepsis he had washed the uterus and kept a glass drain in it. When this condition arose he thought it an extension of the trouble to the tube from the



uterus. He packed the uterus with gauze and the next morning the mass was gone, the temperature normal and the woman recovered.

Dr. Glasgow said the tube should not touch the fundus, and should extend to os externum uteri. He thought this case opened up a subject germane to the discussion—namely, what treatment should they give to cases of pus tubes in pregnancy? It was known that a woman could have her menses during pregnancy, and if that was possible, there was no reason why the infection could not go up into the other tube. He believed they should remove such a pus tube every time. He had operated on a woman three and a half months pregnant and removed both tubes without any trouble following. The danger to a woman with a pus tube was greater than the danger from the operation. He recalled a case where a woman had a most severe peritonitis from a ruptured pus tube following a miscarriage, though there had been no pressure there at the time. She recovered, and there was absolutely no trace afterward. Every case of pyosalpinx where pregnancy existed should be operated upon.

Dr. W. G. Moore thought it likely that extremely few cases of pyosalpinx were co-existent with pregnancy. Many cases of puerperal pyosalpinx were probably due not so much to pre-existing disease as to intra or post-partum infection, so it was hard to formulate any rule—first, because it was extremely rare, and secondly, because, in view of the cases reported, the diagnosis had been made post partum.

Dr. Elbrecht thought Dr. Glasgow had answered the question as to the advisability of operating in these cases, when there was a certainty that the pus tube was present, as he had recited one case operated upon successfully by him while the patient was pregnant. These cases were probably not so rare as was thought. If they were old pus tubes with thick adhesions, there was little or no danger of their complicating delivery. In the case that he had had, in which the pus tube had ruptured, the only reason he could see for its rupture was that it was one of the thin walled variety. They all knew that the process of involution would help to cure these cases by the fatty degeneration and absorption following labor. A certain percentage were cured, and he did not believe they were justified in operating unless the symptoms were alarming. Unless there were symptoms of acute pyosalpinx, they should not operate, as it seemed to him unjustifiable, as there was a possibility of stimulating contraction of the uterus by the trauma produced. When operating as far away as the ovary there was not so much danger.

Dr. Glasgow said that in this case he had gouged up a portion of the uterine tissue and sewed it up again. He had never injured a uterus as much as he did in that operation.

Dr. Saunders said he had not made up his mind as to the wisdom of operating on these pus tubes during gestation. He had advised operation on a small ovarian tumor. The patient got along very nicely, went home, and in about a month she miscarried.

## MEDICAL EXPERT TESTIMONY.\*

BY R. B. H. GRADWOHL, M. D., St. Louis

I have recently detailed the history of a medico-legal case in a paper read before the Medical Society of City Hospital Alumni.† In this case, the great glaring fault in our present system of medical expert testimony was developed to a startling degree, *i. e.*, the system of employment of experts so that they become partisans or medical advocates, each pleading his side before the bar of justice, just as does the legal advocate. There may be a field for the medical advocate, but certainly, strictly speaking, there should exist a non-partisan medical expert, untrammelled, independent, both in his employment and in his thoughts and ideas. It is almost impossible nowadays for a medical expert, be he ever so honest, to give perfectly unbiased, and at the same time effective testimony. The partisan character of his employment militates against him. He unconsciously feels that he must develop only those points favorable to his clients. He usually becomes a medical advocate instead of a medical witness. The facts on the other side of the case, as a rule, are not his to compare with the facts on his own side. Consequently, he often starts out on false premises and ends with wrong conclusions.

There was once a time when medical expert testimony in the court of our country possessed almost judicial weight. That time no longer exists. As Wharton, in his work on Evi-

dence, said: "When expert testimony was first introduced, it was regarded with great respect. An expert was viewed as a representative of a science of which he was a professor, giving impartially its conclusions.

Two conditions have combined to produce a material change in this relation. In the first place it has been discovered that no expert, no matter how learned and incorruptible, speaks for his science as a whole. Few specialties are so small as not to be torn by factions, and often the smaller the specialty, the bitterer and more inflaming and distorting are the animosities by which these factions are possessed. . . . "*Nihil tam absurdo.*" which being literally translated means that there is nothing so absurd that the philosophers won't say it. In the second place, the retaining of experts by a fee proportioned to the importance of their testimony is now as customary as is the retaining of lawyers. No court would take as testimony the sworn statement of the law given by counsel retained on a particular side, for the reason that the most high-minded men are so swayed by an employment of this kind as to lose the power of impartial judgment; and so intense is this conviction that in every civilized community the retention by a judge of presents from suitors visits him not only with disqualification but with disgrace. Hence it is, apart from the partisan part of their opinions, their utterances have lost all judicial authority and are entitled only to the weight which sound and consistent

\*Read before the St. Louis Medical Society, May 6, 1905.

† Medical Fortnightly, April 25, 1905.



criticism will award to the testimony itself. In making this criticism, a large allowance must be made for the bias necessarily belonging to men retained to advocate a cause, who speak not as to fact but as to opinion and who are selected, on all moot questions, either from their prior advocacy of them, or from their readiness to adopt the opinion to be proved. In this sense we may adopt the strong language of Lord Kenyon, "that skilled experts come with such a bias on their minds to support the cause in which they are embarked that hardly any weight should be given to their evidence."

This opinion of expert testimony is held by most judicial authorities in this country.

We should ask in first order, why should this state of affairs have arisen, this disrepute of the medical witness in court, and *demand* why should it be *allowed* to continue?

Witthaus says that the main reason for the bad repute of the medical expert is the "employment of blatant, ignorant persons, or even persons who do not hesitate to commit plain perjury." Certainly, the honest, competent medical man will give fair testimony to a certain extent, yet human nature is such that no matter how honest one's instincts are, there is often felt the intangible, indefinite, yet positive influence of *employment*. One expert on a certain side knows nothing of the facts of his adversary and consequently cannot scientifically sift out the good from the bad. This might be remedied by a conference of experts before a case goes to trial. In some parts of England, experts

refuse to testify unless there has been such a conference.

Another reason for the present disrepute of expert testimony is the fact that very often men are allowed to qualify in court as experts along certain special lines in which they do not really possess expert qualifications. They may be honest in their primary instincts, but they are ignorant. They are perhaps pitted against men who are really experts; in their zeal and ignorance, they make misstatements and disagree with the other side. Their titles may appear much more high-sounding and elaborate than those of the opposite experts of merit. And it is a matter of common knowledge "that fools rush in where angels fear to tread." The ignorant and misguided expert can always be counted on to make absolute and sweeping statements, while his better posted and more conservative adversary will qualify his answers. Thus, it frequently happens that the real expert is apparently overshadowed by another expert who is mentally his inferior.

Responding again to the original proposition by offering a remedy (why should this state of affairs have arisen), we might add that in general a higher standard of medical education is required. The incompetent men, products of the diploma mills, are in abundance. They exist because the diploma mill and "wildcat medical college" is allowed to exist. The irregular schools each year are feeling the noose tightening more securely around their necks. When asphyxiation of these pests will finally have been accomplished then will we have

a natural death of their offspring, the incompetent physician and the incompetent witness. And I wish to emphasize here the point that legal medicine is not taught in our average American medical school. With but few exceptions the course is limited to a few lectures by some prominent member of the bar on "medical jurisprudence." Legal medicine is not medical jurisprudence. Legal medicine is a specialty of medicine. In some schools legal medicine is taught by each specialist devoting a few hours to medical facts coming within his particular field, *i. e.*, the obstetrician teaches his students the signs of abortion, the chemist teaches rudiments of toxicology, the pathologist teaches autopsies, etc. Yet, as Prof. Draper, of Harvard, says in his admirable Text-Book on Legal Medicine, "such a scheme, while plausible, is impracticable. In the nature of the case, it is unfruitful. An instructor gives instruction first and with most zeal in matters which specially interest him. He does not readily turn aside to discuss topics which, however important they may be, are more or less remote from his immediate themes. Moreover, it is evident that there are some things the knowledge of which is essential to a full comprehension of medical jurisprudence, but which are outside any of the ordinary departments of instruction, and should, therefore, have independent treatment. Such topics, for example, as medical evidence in court and the legal relations of physicians to their patients and the community deserve special treatment." Another class believes that if one is well trained in medicine, if he knows his anatomy, his chemistry,

his surgery and midwifery, if he is honest and tells the truth, he need not fear to meet any crisis in court. Forensic medicine, it is declared, is not an independent part of medical science, but a pretender without valid right to recognition. It is asserted that it offers nothing new in medical knowledge, nothing in addition to what is or ought to be within the knowledge of every educated and properly equipped practitioner. That this is an unreasonable position it requires but a moment's reflection to show. The knowledge is the same in general and in forensic medicine, but in the latter it has novel relations and applications out of the common course. "Medical questions," says a high authority, "assume a very different aspect and reflect very novel hues when viewed in the glare of the court of justice from what they do in the mild light of the sickroom or the hospital ward." Germany has the best corps of medical experts in the world, and Germany has the best course on legal medicine in the world. I can quote from the Verzeichniss of the University of Berlin, in the winter semester of 1900-1901, when I was studying there, showing *twelve* different courses on legal medicine. Austria and France vie with Germany in the teaching of legal medicine. And we should have it taught in our schools without delay.

I have pointed out the flaws in our system. What is the remedy? The answer is difficult, yet the query *can* be answered. Mr. Henry Wollman, of the Kansas City bar, in a paper read before the Medico-Legal Society of New York (*Medico-Legal Journal*, March, 1900), suggests the appoint-



ment of a committee of experts by the representative medical society of each district, this committee to serve say for six months of a year. When expert testimony is required in such a district, let the attorneys go to this committee for their experts. Let no member of the society consent to appear in court as an expert witness unless his fellow practitioners have appointed him a member of that committee. This plan appears practicable. Another plan is the appointment by the court or by the governor of each state of a commission of experts. Let these experts be *nominated* by their representative societies. Let them decide matters of expert testimony. Let their fees be paid by the court and the costs afterwards assessed against the side which loses the suit. Let the whole proposition of the *partisan* employment of experts be abolished. It is that partisan spirit which militates against the giving of impartial testimony. It seems contrary to the spirit of Anglo-Saxon law to hope for a system of expert testimony in vogue now in France, Austria and Germany, where the expert is selected by the government on account of special training and qualification. He examines into the medical features of a given case and submits his findings, which are absolutely judicial and admit of no argument. The Cruppi law in France regulated the appointment of experts for the defense in criminal causes. These experts, of course, are well qualified. The French law introduced by Brouardel in 1884 and adopted in 1900 demands a special course of nine months at the Paris University to become a medico-legal expert. The legal physician of Ger-

many must go through a special course and pass the special "physikats-examen" before he is qualified to be appointed. Could we have in this country a special diploma in legal medicine, as proposed by Wyatt Johnstone, of Montreal, we could soon have a special class of men who would be eligible for positions like medical examiners or coroner's physicians. There is a demand for such men. The fact of them possessing a special diploma in legal medicine would well qualify them as experts. They would soon be recognized in court, and their statements would be quasi-judicial, even though other testimony could be introduced. In short, while not possessing officially the absolute dictum-like character of the German or French government expert, they would practically decide the technical medical aspect of a murder charge, relieving the jury of that most arduous, unpleasant and oftentimes impossible task of obtaining an appreciation of the medical points of a case; and yet, withal, Article VI of the amendments to the Constitution of the United States would be held sacred, which demands that "in all criminal prosecutions the accused shall enjoy the right to a speedy and public trial by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense."

## DISCUSSION.

Judge O'Neill Ryan had found the paper a very interesting attack upon the present system of expert testimony. All he could say in respect to the matter would be in a general way as the result of his own observation. His experience had been that there was a general dissatisfaction with expert testimony, so was there with some other matters connected with the cause of justice. There were complaints with respect to the delays and with regard to the jury system. Sometimes a man would *ex cathedra*, state that the jury system should be abolished, and that he would rather have the judgment of one good man than of twelve men, but the experience of every judge in the trial of jury cases had proved that to be a wrong idea. Given twelve honest and impartial and intelligent men, and those men given the facts, and the speaker would prefer their judgment on controverted questions of fact to that of the most trained man who ever sat upon the bench. That jury would decide on the facts and not on a question of law as would the trained mind of the court. So with expert testimony. As with all things of common use it was the subject of much abuse, so that the layman would sometimes say: "I would not give a rap for the testimony of the best doctor, or the best scientist, or the best artist ever put in the witness box." That was merely pride of personal opinion. It was often invaluable and often essential to the proper presentation of certain cases, the decision of which rested with the twelve men in the box. His observation as a judge had been that the jury sometimes disregarded

the apparently expert testimony, relying on their own judgment and often the result met with the approval of the court. On the other hand, they sometimes gave great weight to expert testimony, therefore it was important to consider briefly the requisites of expert testimony and the duties of the medical expert. Most often medical expert testimony in civil cases was introduced in support of or in opposition to claims involving personal injuries, and most often in cases generally characterized as neurasthenic. The expert, to begin with, was too often a partisan. Perhaps that was inevitably incident to his employment. It was hard for a man to dissociate himself from the fact that he had been retained by one side. It was to be hoped that he had received a reasonable retainer, and possibly he would expect a liberal refresher, and what the fee result would be would depend upon the outcome of the suit. The consequence was that the man became a partisan. He ought to be impersonal, as it were, in respect to his declaration of his opinion on the facts at issue. Now, the question was, could that object be brought about by the payment of experts selected by the court or by the state? Hardly, for the man who was perfectly expert along certain lines became just as earnest in his desire to bring conviction home to his listeners as the paid employe of one side or the other. Then there was the danger with respect to appointments by the governor of a selection not only not appropriate, but exceedingly unwise, for governors were not endowed with more than human intelligence and judgment, and there would always be



the danger of the selection of men who might not be up to the standard or meet with the approval of such a gathering as here of the St. Louis Medical Society. In certain classes of cases the selection of experts, when needed, might be left to the courts, their fees to be paid by the parties as ordered by the court after the hearing. But they must be paid, of course, by somebody. The ideal expert, though it was impractical of accomplishment, would be the man selected for his particular qualifications to express an opinion, and who would render his services for the glory of the profession, and without an idea of compensation. But how many members of this society, for instance, would be willing for six months to go to court for nothing but the glory and give testimony when called upon by the judge or the lawyer. The thing to be aimed at was to secure experts who, when put upon the stand would recognize the high obligation which a man places upon himself when he undertakes under oath to tell the truth, and to give his opinion in respect to the matter inquired about, whether it helped or hurt the person who might for the time be his employer. There was an obligation upon the expert to give to the court an honest opinion, and to give that opinion in such terms as to make it understood by the twelve ordinarily informed men in the box. The great majority of men learned in medicine or law were men of character, men who valued their work and who rated the honor of their profession far above its emoluments, and until such men were employed it would not be possible to have efficient

experts, no matter how experts were secured or how they were compensated. Physicians were put upon the stand who had been retained by the plaintiff or defendant, usually the defendant, because the defendant was generally a person of means, and were asked questions that had doubtless been put to them in the privacy of the office, for no lawyer would put a man on the stand and ask him a question without knowing what the answer would be. Those questions the witness would answer favorably to the inquirer. Then would come questions put by the counsel on the other side, and to the credit of the profession the answer had often been not only helpful to the other side, but destructive to the case which the expert was employed to uphold. He recalled a case of the kind in which Dr. King, whose memory had been honored here tonight, had testified in a manner that did him honor. He had not seemed to care whether his side won or lost. In fact, from the way he gave his testimony, the speaker would have been at a loss to know whether he was for the plaintiff or the defendant. Again, experts were too prone to be profoundly learned in their speech. They gave forth words of great learning and a thundering sound, and one didn't know whether they were talking about the milky way or neurasthenia. He had seen in a legal journal recently one such answer that illustrated the point. It was a damage suit. A horse's hoof had struck some chap on the cranium with extraordinary results, so far as damages were concerned. The lawyer asked the witness, a physician,

what the result had been so far as the injured person was concerned, and this was the reply:

"Anterior to the right parietal eminence, running parallel with the coronary suture into the squamous portion of the temporal bone, there is fracture of the bone as long and as wide as the finger. Its edges run parallel to each other and are slightly arched with the convexity posterior; the anterior is sharp, the posterior depressed. On the inner surface of the skull the vitreous table is detached and the dura mater lacerated. In addition, there was found between the latter and the internal meninges a thick layer of recent blood coagula."

What could that jury understand from that answer? The man most profoundly learned was the man who could make his knowledge luminously clear to the men who did not possess similar technical learning. Answers analogous to the one quoted were sometimes given to the simplest question. If a man was cross-eyed it was spoken of as a case of strabismus. One reason the jury so often disregarded the testimony of the expert, was because it was absolutely impossible for them to understand it. The younger men should be impressed with the necessity, when called upon as experts, to give briefly their opinion, to give it without fear or favor, and to give it so far as possible so clearly that the man who runs may read. Certainly technical words would have to be used occasionally, but generally speaking it was possible to use terms of one kind or another so that the average man would understand them. When those two conditions were present—when it was evident

that the physician would give his honest opinion in respect to the matter involved, and that he would give it in a way that the jury could understand—the opinion would always be given weight by the jury. The character of the man giving the testimony had great weight. When an opinion was given by trained men, honest men, men without mercenary motives, there was no fear or doubt of the plane upon which such expert medical testimony would stand.

Dr. H. J. Scherck wanted to give credit to Judge Bishop for the plan now in operation in St. Louis in regard to the criminal insane. During the past week he had been five times in court and twice before the grand jury. There were a great many cases in which he was called, but he would speak only of the criminal insane, criminals charged with crime in which sanity or insanity might exist. When he had taken charge of his office and found that he would be asked to testify in these cases of men charged with crime he consulted with Judge Taylor, Mr. Bishop and Mr. Hancock, and he had suggested to them a plan which he hoped would become an institution, but which was now in operation entirely informally. This idea had been suggested to Dr. Scherck by his having been subpoenaed in the case of a man charged with murder and the expert's testimony to the effect that the man was insane, the testimony being based on a mere hypothetical question. Since he had laid this plan before the gentlemen mentioned three men had volunteered to help him in his work, Dr. Graves, Dr. Fry and Dr. Schwab. Whenever he suspected that a man in the jail



showed symptoms of mental disturbance he was observed day after day, and the findings and the ultimate result of these findings were placed at the disposal of the court. Since this scheme had been inaugurated they had passed on six. Some of these cases had been clear, some very difficult. He believed this solution, so far as this branch of the subject was concerned, was about as practical as could be hoped for. He was glad to bring it up because it was through Judge Bishop's aid that he had been able to bring it about.

Dr. Robert Barclay said there were a few points in his limited experience that seemed to throw some light on the matter. He did not think the case was quite as bad as painted by the essayist of the evening. He thought the trouble was that there was defective medical education along this line. There were a few points misunderstood by many men when called to the witness stand. First, that they were called to testify *ex parte*. The suggestion that certain men should be trained to be professional witnesses he did not approve in the slightest. Men could become experts from their study and experience only, and they could be selected to testify as experts from their reputation for skill and sincerity without previous training to testify in courts of justice. A man was just as competent to express an opinion in a court of justice as in his private relations.

Two facts which should be remembered usually had not been borne in mind by medical witnesses: First, that they are called to assist *the court* in getting at the truth. Their ability to render that assistance depended,

first, upon their competency as expert witnesses; next, upon their sincerity as witnesses. If the question of compensation were settled in advance, they are able to say of themselves: "My fee is settled; I am not retained by either side; personally, I am not interested in the verdict." And if his fee has been commensurate with his ability, his sincerity will not be questioned. His competence as a witness will, of course, have to be determined by the court. Dr. Barclay was surprised that a man who had only seen two cases would be allowed to qualify and testify as an expert. No intelligent attorney would want to put such a man on the witness stand as an expert, nor one who was untruthful or incompetent as an observer. Medical experts are not called as advocates or as judges; they are called merely as a part of the machinery necessary to get at the truth. And Dr. Barclay did not believe that any attorney would knowingly employ as an expert witness one whom he did not believe to be truthful. As to the technical way in which doctors testify on the witness stand, he explained that physicians were taught by the lawyers not to confound their inferences with the facts they had observed; consequently, they should not say that a man had typhoid fever or suppurative otitis media. They should only tell what phenomena they saw, and what was there. Then when the question might be asked what was the matter with the man? they might give the diagnosis in a term, as an inference. But that was another proposition. Those technical terms must necessarily be used by experts to avoid verbose, confusing periphrases.

Lawyers frequently tried to bully the doctors out of the use of technical terms, but since these have an exact technical meaning, a meaning which is circumscribed, their use by experts upon the witness stand could not and should not be avoided.

Dr. W. B. Outten was very much interested in the subject of expert testimony. In his younger days seeing so much that was unjust and wrong he, too, became a reformer like Dr. Gradwohl, and had written upon this subject more than twenty years ago, but after an extended experience of over twenty-six years in courts of law, he deemed himself more competent to judge regarding this subject than in his younger days. He had heard the medical expert testify when he knew that he was wrong, but that he thought for every dishonest expert there would be at least fifty if not a hundred who had striven to testify right.

Regarding the adoption of European methods in this country, it has to be understood that the countries are not comparable as regards their courts of law or as regards their legal system; that in this country we have to depend upon the jury system, and after all that could be said for or against it, the jury system was excellently adapted in a young and thriving country like this. Now, Judge Ryan, spoke about "railway spine," and evidently left the impression that it contained many hidden elements.

In order to see how much confusion existed regarding this subject all that was necessary was to read a history of the subject from its start until the present time. Thus Erickson in 1866

wrote his first book upon this subject under the title of "Railway and other Injuries of the Nervous System," from this work sprang the term "Railway Spine." In 1875 he wrote another work on "Concussion of the Spine," from this book sprang the term "spinal concussion." Now, in the meantime the subject as written by Erickson evoked much discussion all over the world, owing to the influence of Charcot and his pupils; and to the additional fact of a preponderating prevalence of hysteria in France, most of the masked forms of traumatic nerve disorders were claimed by Charcot and his school to be only manifestations of hysteria. Oppenheim in 1889 in a masterly manner described the symptom group of traumatic nerve disorders arising from railway injuries under the name of "traumatic neurosis;" he recognized their close alliance to hysteria and neurasthenia, but general traumatic neurosis was essentially the same as now described under the term "traumatic hysteria" and "traumatic neurasthenia."

Long and continued discussions between the German and French writers finally established traumatic hysteria and traumatic neurasthenia. The general discussions concerning the effects of litigation in "railway spine" evolved the term "Litigation Psychosis." In 1890 Clevenger endeavored to group symptoms under the name of Erickson's Disease. Allan McLane Hamilton in his new work published in 1904 has created a new term named "Accident Aboulia." So that the following synonymous terms exist: "Railway spine," "concussion of the spine," "traumatic hysteria," "trau-



matic neurosis," "traumatic neurasthenia," "litigation psychosis," Ericksen's disease" and "accident "abou-lia."

What wonder, then, that judges, juries and court, get mixed on this subject. Some ten years ago he had written a monograph in Whitthause and Becker's Forensic Medicine, on this subject. Now, concerning Judge Ryan's belief that the medical expert generally aims to be honest and just, he believed the judge's opinion was based upon the fact of an absolute experience as judge in courts of law. There need never be any trouble or unjust criticism where any medical expert simply aims to tell the truth.

Dr. Joseph Grindon felt that this matter was of the greatest importance. In spite of the comforting things they had heard from Dr. Outten and the kind and soothing things said by our legal friends it was a fact that this matter of legal testimony was in a very deplorable condition. This was probably due to its necessarily partisan character. It was to be hoped that something would grow out of the discussion of the evening and that a scheme would be presented later to the society, looking to the appointment of some committee or commission by the court, or some such method as Dr. Barclay had suggested, by which the expert would collect his fee beforehand, the fee not being contingent upon the outcome of the case.

Judge Bishop did not believe physicians were partisan in their testimony more than other people. It was very seldom one could find a witness on the stand absolutely non-partisan. As a judge he had been impressed by the

fact it was almost impossible to get a witness to tell the plain, unbiased truth. He was glad that the suggestion had been made that attention should be paid in the medical schools to this branch of legal medicine. It did not follow because a man had followed his profession five or ten years that he was an expert. A man might be a splendid surgeon or physician, and enjoy honor at the hands of the profession, and yet be incapacitated as an expert. Several years ago he had defended a client charged with murder for poisoning a man with arsenic. A young man, a witness for the state, had gotten on the stand and testified to the effects of arsenic. Judge Bishop asked him, after referring to a toxicology which he held in his hand, if such and such symptoms were always present in cases of arsenic poisoning. The young man replied that they were. After asking a number of similar questions, carefully following the book, and to each of which the young man replied in the affirmative, he then handed the witness the book and asked him the difference between arsenic poisoning and poisoning by tartar emetic, for the symptoms had been those enumerated under poisoning by tartar emetic. He asked the witness if arsenic was a vegetable or a mineral and the reply was that it was of vegetable origin and was made out of bark. He remembered one physician, a very eminent man, who had testified very thoroughly as to the symptoms of strychnine poisoning, and when asked how many cases of strychnine poisoning he had ever seen, he said that this was the second one. He was not, therefore, an expert. Physicians were

used so much in cases, both civil and criminal, that it was a subject which should be well studied in the schools. A man graduating from a medical college should be fitted to go on the stand, to know what he was there for and what would be the general character of his testimony. He ought to be a trained witness in the method of testifying. Dr. Taylor, in his work on expert testimony, had impressed upon the profession the need for this training in legal medicine. Many a man's life depended upon the testimony of the physician. Many a criminal had escaped on the testimony of a physician, but he hoped no man had been unjustly condemned on such evidence. One other suggestion he made from his own experience; he did not believe in the hypothetical question. He did not believe any doctor who had any experience with it believed in the hypothetical question. These questions were prepared by the lawyers based upon what they believed to be the facts in the case, and he had never heard a hypothetical question that seemed to him exactly fair. If the physician sat in the court room during the whole of the trial and could hear all the testimony and size up the witnesses themselves, then he could frame his own judgment just as the jury did. They should hear all the testimony, see the witnesses, form their own judgment and they would be better fitted to testify than when simply called out and asked a hypothetical question. When the ability of the experts was to be determined by the jury, and there were several experts on each side, the jury was apt to say, "These doctors know a whole lot;" then they would count noses,

and if one side had one doctor more than the other they joined the majority.

Dr. L. Bremer, after hearing Dr. Outten's glowing account of the honesty of the expert, felt in honor bound to say a word from his own experience rather disparaging to the honesty of the average expert, though he was sorry to contradict Dr. Outten, who was an old friend of some thirty-six years' standing. Some wise man had said that liars were grouped in three great classes: liars pure and simple, damned liars, and experts. The exhibitions witnessed in courts where experts appear were simply disgraceful. He had been so unfortunate as to have to try to bring his views before a court and jury and his remembrance of the majority of such cases had left a brown bitter taste in his mouth, the taste of disgust. He had come to the conclusion that there were many willful liars in the medical profession as well as in the legal profession. The very nature of the business of an expert was apt to drive one into taking sides. Very frequently it was the aggressiveness and vindictiveness of the opposing counsel that led the physician to try to irritate him. It would take a saint to remain impartial upon such an occasion. It would be many a day before America arrived at a solution that had been arrived at in Europe. Germany was a police regulated country. If a stranger arrived in town, that night the police knew where he was born, where he came from, if he had had the measles and whether he had been vaccinated. Yet even there the system was not perfect. In one case, celebrated and notorious experts, appointed by the government,



inquired into the sanity of a certain count who had murdered his mistress, reported that they found him perfectly normal, but the friends of the count had sent for a noted French psychiatrist, who said, "You may condemn that man, but in two or three years he will be dead of softening of the brain." He was right. It was found that the man was demented and it was while in such an abnormal state he committed the murder. In reference to Dr. Scherek's remarks, he did not think it was at all impossible for the jail physician to make a correct diagnosis as to the mental status of the criminal. If any one did have an opportunity of perfecting himself in the subtleties of such a diagnosis, it was the jail physician. Dr. Priest, a former jail physician, had been a man of great acumen and capable of sizing up the mental status of the criminal. A great many men of wide experience sometimes made mistakes. Very often the policeman was a better diagnostician than the high-falutin psychiatrist. Besides, there rested upon the psychiatrist the suspicion that he was just a little daffy himself. As to the deficiencies in expert testimony, it was not all the fault of the expert. It was the fault of the law-

yer, too. So far as stilted and grotesque technical language was concerned, they could beat the doctor.

Dr. Gradwohl, in closing, said that he had brought this matter up for discussion, not with the idea of reforming the world, as Dr. Outten would have it reformed when he had read *his* paper before this society twenty-five years ago, but for the purpose of reforming the system of medical expert testimony. Unhappily, Dr. Gradwohl said his limited experience had differed somewhat from the large experience of Dr. Outten in that he had heard gross perjury once committed by a medical witness in a murder case, and he was prepared to prove this assertion by referring to the court record. Dr. Gradwohl said that he did not intend to sweepingly accuse the medical profession of dishonesty in giving testimony, but simply to show to what extremes partisan testimony would lead a witness. And he had intended to show that possibly some means might be instrumental in changing the system which allows and really calls forth partisan testimony. He wanted to go on record against the system and urge the society to enact measures looking towards a betterment.

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## TRAUMATIC RUPTURE OF THE SPLEEN; SPLENECTOMY; RECOVERY.\*

BY ROBERT E. SCHLUETER, M. D., of St. Louis.

On February 20, 1905, the writer saw H. H., male, aged fourteen years, at the request of Dr. A. F. Henke.

The following history was elicited:

\* Read before the St. Louis Medical Society May 20, 1905.

On the previous evening the patient was coasting on a hill near his home. While descending on his last trip he noticed in front of him a girl on a sled. In order to avoid a collision with the girl he steered his sled to one



side, keeping his eyes fixed on the girl. Suddenly his sled was stopped by a post and he felt a sharp pain in the epigastrium. Patient cannot tell what part of the sled came in contact with his abdomen. Feeling badly, he walked to a bench which was near and rested for awhile. Then he walked to his home, a distance of several hundred feet, and lay on a couch until late in the evening, when Dr. Henke was called. He found the patient pulseless and presenting other symptoms of internal hemorrhage and shock. He had vomited a large quantity of red blood. Appropriate restoratives were applied. By daybreak a pulse could be felt and the patient's general condition had improved materially.

Physical examination at 7:45 A. M. showed a boy of only fair development. Lips pale and facial expression anxious, pulse barely perceptible and fluttering. No external evidence of contusion. Abdomen tympanitic, except over an oval tumor in the hypogastrium (the distended bladder) and in the left hypochondriac region. There a slight relative dullness could be made out. This dullness was more pronounced laterally and posteriorly. The patient complained of tenderness over the whole abdomen. The point of greatest sensitiveness was over the region of the stomach; none over the spleen.

Diagnosis Before Operation: Laceration of the spleen and probable injury to the stomach.

He was removed to St. John's Hospital and the bladder catheterized. About one and one-half pints of normal urine was removed. Immediately his pulse became stronger, and

the patient felt so much relieved that his parents intended to withdraw their consent to an operation. After some delay he was brought to the operating room at 1:55 P. M. Ether anaesthesia was commenced, but the patient took it badly. Then chloroform was substituted with better result. An incision three to four inches in length was made in the median line, midway between the ensiform cartilage and the umbilicus. Some dark fluid blood was seen in the peritoneal cavity. The anterior and posterior surfaces of the stomach were examined. Nothing abnormal was found. Considerable dark liquid blood was noticed in the lesser cavity of the peritoneum. The liver, gall-bladder, colon and small intestine were found uninjured. Around the spleen was found a large blood clot. Of this, as much as possible was scooped out with the hands. The first incision being inadequate, and not permitting free access to the spleen, it was enlarged upward to the xiphoid cartilage, and downward to a little below the navel. The field of operation was now cleansed with several quarts of hot normal salt solution and the lacerated spleen brought to view. While separating a few adhesions anteriorly, the lower segment of a bisected spleen was completely separated. This was laid aside and the other piece searched for and found high up near the diaphragm. No adhesions were observed on this piece. After bringing it down low enough to see the pedicle, large clamp forceps were applied and the remains of the spleen cut away. The stump was transfixed with medium silk and ligated *en masse*. The belly was closed with through-and-through silk worm

gut sutures after more salt solution was poured into it. The patient was returned to bed at 3:10 P. M. Pulse 160, temperature 101 2-5° F.

The post operative treatment was that of an ordinary coeliotomy. The wound healed by primary union. On account of the length of the incision the patient was kept in bed for four weeks. No serious untoward symptoms occurred during convalescence. His temperature did not remain normal until the fourth week.

After the fifth or sixth day he was permitted to eat raw bone-marrow. It was added to his broth and mixed with other foods whenever it was considered palatable. During the second week the lymphatic glands were appreciably enlarged; but, even now, none of them have hypertrophied enough to be noticed, except by palpation.

On March 19th a blood count was made: Erythrocytes, 4,500,000; leucocytes, 16,000. No abnormal cells were found in several stained specimens. Hæmoglobin, 80 per cent. (by Talquist scale).

He is now alive and enjoying good health. The loss of his spleen causes him no apparent inconvenience.

At one time during the operation, a transverse incision at a right angle to the original cut was considered. It was, however, decided that the liability to post-operative hernia would be less by extending the original incision at both ends in the median line. This opening afforded, with forcible upward and outward retraction of the left half of the abdominal wall, a fair access to the injured organ.

In reviewing the literature on the subject I notice that the mortality of

this operation, when it is done for injury, is considerably lower than when it is undertaken for the relief of other pathological conditions. Also that young persons endure a splenectomy better than older ones.

The blood supply to the lower segment was completely destroyed. But for a few weak adhesions it was practically lying loose in the abdominal cavity. The upper half was still attached and no injury to its blood supply was noticed. Bleeding had been spontaneously arrested at its lacerated edge. But the broad surface of this edge especially favored secondary hemorrhage. It is highly probable that an attempt at saving this piece would not have yielded as good a result as did the total extirpation of the organ. Our patient is indeed fortunate that he did not succumb to the primary hemorrhage from such a broad surface. Also that no other abdominal viscera were injured. Most cases show some disagreeable, or even alarming, symptoms during and after convalescence. Weakness, emaciation, thirst and drowsiness have been observed. The administration of extract of sheep's spleen and raw bone-marrow usually relieves this condition. Anaemia and leucocytosis have been reported. Heaton's case (*British Medical Journal*, 1899, August 19th) reports 60,000 white cells per c.m.m. Enlargement of the lymphatic glands is usual after splenectomy.

#### DISCUSSION.

Dr. W. C. G. Kirchner was particularly struck with the despatch with which he had gotten hold of the case and pursued the proper treatment. Of two cases which he had seen, one

was a man who had been struck in the side with a wagon tongue. He arrived at the hospital in collapse, complaining of a good deal of abdominal pain, but no contusion could be made out, and, being in severe shock, he was simply watched. Dr. Horton, the senior physician, later saw the case, and made a diagnosis of rupture of the spleen, but the patient was too weak for operation. One week later a laparotomy was done. The incision was made in the semilunar line. The spleen was found very soft and almost enucleated. It seemed that the first hemorrhage had been controlled, and after a period of some ten days the clot was absorbed and hemorrhage was re-established. The sec-

ond case was that of a detective who had been shot in the left hypochondriac region. Where the bullet impacted with the spleen there was a stellate fracture, and the greater portion of the spleen was torn away. The patient at first did not suffer from the effects of the shot at all. Later there was a sudden change in his condition. At the time of the operation the abdominal cavity was completely filled with blood. In this case the spleen was removed, but the patient did not live long after the operation. Hemorrhage in both cases was terrific. Both these patients died. It was interesting to note that in Dr. Schleuter's case the spleen was removed through a median incision.

### PYOSALPINX—REPORT OF CASE.

BY HENRY ROHLFING, M. D., of St. Louis.

The inflammations found in the pelvic cavity may be due to a variety of causes associated with destructive influences upon one or more organs and adjacent tissues, according to their anatomical relations and physiological function. The organs of reproduction are, perhaps, the common carriers of infection; interferences of their normal function, or agents of irritating character, producing circulatory disturbances, thereby preparing the tissue for ready inception of specific bacteria.

The case I wish to present concerns a patient thirty-two years of age, married about seven years, never given birth to children, good family history, regular menstruation, never

was pregnant; was regularly treated by a physician for a leucorrhœal discharge, both locally and constitutionally, without a cure. When patient presented herself she still complained of a profuse yellowish discharge; painful urination. A douche of permanganate potash was used twice daily for some time, to control the discharge, but no effect produced; patient began to have elevations of temperature, complained of deep-seated pain, a chill making its appearance.

Bimanual examination very painful; doughy swelling bulging on the left side of cervix. A speculum was placed in position and a free incision made, evacuating quite a quantity of pus; gauze drainage. Temperature fell within a few hours and pain less

\*Read before the St. Louis Obstetrical and Gynecological Society, May 11, 1905.



severe, making her condition more tolerable. The pus discharges kept up for some time, the gauze strips frequently renewed; hot vaginal douches of bichloride sol. 1-4000. This procedure was continued for some ten days, and abscess cavity became smaller, finally closing. Patient felt very much relieved, free from pain and fever, appetite improved; her strength returning, she was allowed to get up and walk about.

Some two weeks later vaginal discharges again made their appearance together with deep-seated pains; the speculum was again placed in position and uterus seized by forceps, but appeared to be fixed; not able to draw it down. This maneuver caused a free discharge of a muco-purulent secretion from the os uteri. Making a number of cover-glass examinations, gonococci were readily found. Bimanual examination indicating a doughy swelling higher up and induration at site of old abscess, it was hard to determine any well defined tumor. On account of pain and continual suffering, patient yielded to abdominal section. After opening the abdomen, adhesions became troublesome, distorting the anatomical position of the pelvic organs. Carefully separating with fingers, a mass well circumscribed and elongated was brought up into the wound, proving to be an enlarged tube and degenerated ovary. In attempting to remove the tube, rupture occurred, evacuating a quantity of pus, which was dipped out by dry gauze sponges, and the tube readily removed after proper ligation. In introducing the hand for the second time, the right tube was found abnormally displaced

backwards, posteriorly to uterus. This was removed with less difficulty. Carefully wiping out the pelvic space with dry gauze sponges, the abdominal wound was closed, leaving a gauze drainage at the lower angle of the wound. The patient recovered without complications, leaving the hospital after three weeks.

The specimens removed were hardened in 5 per cent. of formaldehyde solution. The left tube was very tortuous and much thickened, measuring about six inches by one inch at the widest diameter; the right tube was about four inches in length, thickened and tortuous, the fimbriated extremities atrophied, partially absorbed.

Microscopical sections were made from different portions of the tubes, also from the left ovary, with the following results: The external fibrous sheath hyperplastic, as also the muscular coat dilation of the blood vessels engorged with leucocytes; parenchymatose hæmorrhage within the outer sheath of fibrous tissue extending into the muscular tunic; the mucous membrane was devoid of the ciliated columnar epithelium, free infiltration of leucocytes throughout; towards the lumen numerous granular epithelial cells, ovoid in shape, termed by some authors as mast cell (literally feeding cell), by Ehrlich generally found in chronic inflammations. I was unable to demonstrate the gonococci within the tissues or mucous membrane. The gross macroscopical appearance fails to show a flattening of the mucous membrane with dilatation of the lumen, but rather a general hyperplasia; therefore the term salpingitis appears to

be more appropriate than pyosalpinx (pus tube).

It will be noticed from the description of this case that a strict anatomical classification as described by Luschka, dividing the pelvic cavity into three divisions (peritoneal, sub-peritoneal, or parametrium and subcutaneous), cannot well be applied as to distinct and separate pathological findings. For example, the subperitoneal cavity or parametrium, with all its loose connective tissue and fat, containing numerous arteries, veins, lymphatics and nerves, is more prone to inflammatory troubles than through the channels of the uterus and appendages, causing inflammations within the peritoneal cavity. Some authors claim that the tubes when diseased in marked cases of pyosalpinx, produce secondary results in the parametrium by contact infiltration to the neighboring tissue. Emmet and others claim that the parametrium in its diseased state produces secondary results in the uterus and appendages.

Apart from the lesions incident to the puerperal state, I believe that the parametrium may become affected as a complication to salpingitis; that gonorrhœal endometritis may exert its influence in the direction of the parametrium and tubes at the same time. It is generally conceded by all authorities that gonorrhœa is, perhaps, the most frequent cause of pyosalpinx. At the present day patients are better instructed as to the necessity of early and careful examination, and the chronic cases that present themselves must become less in number. I think examinations microscopically in cases of vaginitis and

endometritis in their acute stages, will prevent the disastrous complications known generally under pelvic cellulitis.

The most frequent cause of salpingitis being gonorrhœa, there are many cases of salpingitis, ovaritis and pelvic-cellulitis due to hygienic influences; therefore I wish to prevent the possible error in saying where salpingitis is present, that gonorrhœa preceded same; this is by no means proven. In the case presented the discharge contained gonococci, but none of the tissues removed by operation showed any present specific germs; the ravages of the disease prevent further parasitic influence of the gonococci on the tissues.

#### DISCUSSION.

Dr. C. H. Dixon wanted to know whether Dr. Rohlfsing thought the temperature was due to the refilling of the left tube or to the trouble in the right tube? In all cases of pyosalpingitis it was recommended to remove both tubes even if only one was apparently affected, as long as there was a discharge from the uterus; for if but one was removed, the infection would likely extend and affect the other tube.

Dr. O. H. Elbrecht always stripped the tube to see if there was any pus there. The fact that the gonococci were found in the vaginal secretions and not in the tubes, was not unusual. Possibly he had punctured the right ligament and got the abscess in that way. In these chronic salpingitis cases, as a rule, the pus was very creamy and the gonococci were not usually found. It had been his experience at the Female Hospital that

the leucocyte count in chronic cases was low; in the acute stage, or where the pathology was progressive, the leucocyte count might be 15,000 to 20,000, and in a very acute attack the leucocyte count might be as high as 25,000 to 30,000. When the infection was so progressive that the body could not cope with it, then the leucocyte count was also low, if it was dammed off nicely. The absence of a high leucocytosis did not indicate absence of pus. He asked Dr. Rohlfing if the omentum or intestines were adherent, and was told that the intestines were. He had found that the omentum usually loosened up after the condition had been there six months or so.

The president said that in some old cases he had seen about fifteen years ago, he had liberated the pus through a vaginal incision. Instead of using gauze drainage, he had used double rubber tubing. He irrigated the pus cavities every day for a week or two, and the patients had been well since and had required no further treatment.

Dr. Elbrecht said that the only case where he had done a colpotomy was brought to the hospital by a physician who had ruptured one of the pus tubes by examination. Peritonitis was beginning, so he had gone right in to the cul-de-sac and brought down the tubes. He considered this a very temporary procedure for relief, as it usually brought on more trouble later. It only resulted in another serious infection, and gave the adhesions a chance to progress. Instead of tying them off with silk, as was usually done, he had been in the habit of making an elliptical incision

around the tube to cut out the cornu in the shape of a wedge, and then closed the wound with catgut. He had had occasion in two cases to go in after the other tube, and thus saw the result of his first operation. He used to be more conservative about leaving the second tube, for one case came back pregnant, which made him consider thus justifiable at times. If the wound was sewed over after taking the tube off, no adhesions would result, and the wound, when healed, would be comparatively smooth. Unless it was cut out thoroughly and the peritoneal surfaces sewed together, the adhesions following would be thick at that point.

Dr. Frank Glasgow said that his own method was to enucleate the tubes and burn them off as close as possible to the entrance to the uterus, and then cover over. He went on the theory that tying it off was irrational. Years ago he had found two or three cases where a little knot formed on the outside, which led him to consider it irrational. By this method adhesions were avoided, and also the possibility of re-formation of a pus sac. This was a most beautiful specimen of salpingitis in contradistinction to pyosalpinx. As to the difference between the two in life, it would be quite impossible to distinguish.

Dr. Elbrecht believed that method would be obsolete in a few years. For the time being it sterilized the wound but a deeper wound resulted, and one never knew whether he had reached the real depths. Often only the superficial elements were affected, and the divested area made an excellent culture medium. When it was cut out re-



covery was more speedy, for nothing healed quicker than peritoneum. The incision must be at least half an inch deep. He had been doing that recently in hysterectomies in the disposing of the cervical mucosa, and the peritoneum came together beautifully.

Dr. Glasgow thought Dr. Elbrecht was not quite correct. If he cut the pus tube across, no matter where, he would let the pus out of there. The object in using the cautery was to prevent that. He would leave some pus in that tube near the ligature, anyhow, and it was better to leave charred tissue there than pus. He did this in the removal of the uterus, invariably. He cut all around the cervical canal and then had the cautery ready and went right down into the canal. In that way no septic matter could get out of the cervical canal, so he had never had any trouble. One ought to save the peritoneal cavity from possible infection.

Dr. Elbrecht replied that the peritoneum would come together any way, whether there was any pus there or not.

Dr. Glasgow insisted that he didn't want any pus there. Dr. Elbrecht saying that they couldn't help having it there. Dr. Glasgow added that there was no reason for having it there if they burned the tube off, thus sterilizing it perfectly.

Dr. H. S. Crossen said the recurrence of symptoms after draining of a tubal abscess through the vaginal incision, was usually due to trouble in the other tube. In this case he was inclined to think that it was involvement of the second tube.

Dr. Elbrecht said that what threw

him off was the same degree of hyperplasia in both walls.

Dr. Crossen replied that it would be quite possible to get that degree of tubal thickening in a month. He would not say that was a chronic pus tube without a microscopic examination. The history given pointed more to an acute or sub-acute trouble.

Dr. Rohlfsing said that he had stated in his paper that he believed all these conditions took place simultaneously. It had not been possible to demonstrate any marked tumor on examination. He had found the right tube behind the uterus. The adhesions were very marked. There was no history of any acute infection.

Dr. Crossen believed that parametritic abscesses from these cases were very rare. Of course, if the collection of pus was far to one side, or if on doing an operation thoroughly, there was found a pus cavity beneath the layer of the broad ligament, that would settle the matter. A discussion of this as a case of chronic salpingitis was hardly permissible in view of the short duration of the trouble as indicated by the history given.

Dr. Rohlfsing said there was an induration at the old site, showing that something was there formerly. The question was, did this parametritic abscess exist at the same time, and was it caused from the same source?

Dr. Glasgow did not see why it was absolutely necessary for the abscess to depend upon those tubes. Those tubes looked as if they were the product of months or years of inflammation. The condition of the inside of the tubes would contraindicate the presence of an active variety of infection.

Dr. Elbrecht said he had seen patients who had gone about for a year or two, or longer, and the history in itself did not indicate much trouble, but the lesions that were found were very alarming. The history of complaint did not amount to anything, as

about 50 per cent. of the women who had pus tubes did not know it until months afterward.

Dr. Glasgow said that the time when they had pain was shortly after the infection, during distention, and then it would subside.

## THE STATUS OF ORGANIZATION IN MISSOURI.

By J. N. McCORMACK, M. D.,

Chairman of the Committee on Organization of the American Medical Association.

In making an extended itinerary in Missouri, carefully planned by the council and covering every geographical division of the state, an opportunity was given for a close study of professional affairs and the causal conditions producing and modifying them. In a state with practically unlimited agricultural and mineral wealth, with a total population of 3,500,000, over 6,000 physicians and with soil, products and material development as varied as it is possible to imagine, problems were presented in medical sociology as complex and interesting as those found in any other state I have visited.

There is a sense in which Missouri is a newer state than the bare facts of its history would indicate. It is only in recent years, comparatively, that its great natural wealth has been fully understood, and since then the development has been by leaps and bounds. The medical profession has had its full share of this growth, as indicated by the abundant representation in it from every section and country, and the over-supply of medical schools within its own borders. The proper assimilation of such a rapidly accumulating and diverse professional ma-

terial would have been difficult under any circumstances, and but little effort was made in this direction. Two years ago the state association had but two hundred and fifty-eight members, less than 4 per cent. of the medical population, and but fourteen of the one hundred and fourteen counties had even nominal local societies. It is true that there were a number of district societies over-lapping each other in every direction, but in most of them the active membership was small, the meetings infrequent and neither they nor the state body could claim to be representative of the profession, and they did not exert, or seriously attempt to exert, any great influence upon its rank and file.

The results of these conditions were reflected in all professional affairs, but were most evident in regard to legislation and its enforcement. Fads and isms sprung up and flourished as they have not been able to do elsewhere, while the ordinary forms of quackery became more firmly entrenched and were more brazen and blatant than in any other state in the union, except it be in Illinois.

Within two years after the adoption of the new plan of organization the

membership in the state association grew to sixteen hundred, seventy county societies had been established and, on the surface, the progress seemed great. Upon investigation, however, it was found that most of these societies had little existence except upon paper, that few of the officers and councilors appreciated the responsibilities of their positions, the feeling seeming to be general that in some way the scheme would work itself out without special effort upon the part of these leaders. It is true that the president, secretary, chairman of the council and a few of the individual councilors had done good work in a desultory sort of way, but others had done nothing, and there had been little of the systematic, comprehensive planning and effort which will have to be made before the profession of Missouri is organized.

I have been in no other state where the profession was more responsive to appeals for the new order of things, and with proper effort it would be comparatively easy, within the next few years, to build up real, vital, scientific and business organizations which could be made helpful to each member in his every-day work, as is contemplated under the new plan, in almost every county in the state. This will require a careful study and treatment of the conditions in each county by the councilor. In this connection it may not be improper for me to say that the impression was made upon me that the initiative of the individual councilors was not being relied upon and developed here as in other states, where the work is being done

more successfully. This was well illustrated in the arrangements for the meetings called in my itinerary. The notices were sent from the secretary's office alone, where they should have been at least supplemented by letters from the individual councilors, making him, and he in turn making his county society officers, responsible for the success or failure of the meeting. The association officers, and the council as a body, should do more rather than less, but the execution of their orders should be more and more through the councilors, those being dropped or asked to resign who are not found equal to the tasks set for them. This is what organization means. To bring it all about will require much careful thought and self-sacrificing labor, but Missouri is so ripe for the work and the returns to its profession and people would be so great, that it is worth all of these and more.

In Kansas City, Sedalia, Jefferson City and probably other points not visited by me there are now fairly effective organizations, and good material for similar ones were found almost everywhere. The leaders of the profession impressed me upon this trip, as they always have heretofore, as equal to those of any other state or section, and it is urged that they can, should and will unite and persist in this great work until it is accomplished. It is this hope and belief, and because I know that they will be received in the kindly spirit in which it is done, that these criticisms, which might otherwise seem harsh, are made.



# FORTY-EIGHTH ANNUAL MEETING OF THE MISSOURI STATE MEDICAL ASSOCIATION.

HELD IN THE MUSIC HALL AT EXCELSIOR SPRINGS, MAY 16, 17 AND 18, 1905.

## MINUTES OF THE HOUSE OF DELEGATES.

FIRST DAY, MAY 16, 1905,  
 MORNING SESSION.

The House of Delegates was called to order by the president, Dr. Jabez N. Jackson, at 10:45 A. M.

The secretary read the roll call, the following members responding:

Adair county, E. C. Grim; Audrain, E. S. Cave; Barton, T. H. Duckett; Bates, E. N. Chastain; Benton, S. O. Davis; Boone, Woodson Moss; Buchanan, O. H. Campbell; Butler, W. E. Highfill; Caldwell, C. C. Leeper; Cape Girardeau, J. D. Porterfield, Jr.; Carroll, G. R. Highsmith; Cass, M. P. Overholser; Chariton, J. D. Brummall; Clark, W. B. Sisson; Clay, H. Rowell; Clinton, R. W. Rea; Cooper, P. E. Williams; Daviess, W. L. Brosius; Dunklin, Van H. Bond; Franklin, A. L. McNay; Gasconade-Maries-Osage, J. H. Ferrell; Grundy, W. H. Addington; Henry, Wm. H. Gibbins; Holt, Ira Williams; Howard, U. S. Wright; Jackson, E. H. Thrailkill, E. L. Chambliss, H. E. Pearse, F. L. Cook, W. J. Frick; Lafayette, C. P. Ryland; Linn, Robert Haley; Livingston, Geo. W. Hutchinson; Marion, Thos. Chowning; Miller, W. S. Allee; Moniteau, J. P. Burke; Monroe, H. G. Shobe; Nodaway, E. L. Crowson; Pemiscot, Paul Tipton; Pettis, W. J. Ferguson; Phelps, S. L. Baysinger; Pike, M. O. Biggs; Platte, S. Redman; Pulaski, G. W. Orrick; Ralls, T. J. Downing;

Ray, L. D. Greene; Saline, D. C. Gore; St. Charles, B. P. Wentker; St. Louis city, V. P. Blair, W. B. Dorsett, R. M. Funkhouser, A. R. Kieffer, F. J. Lutz, W. G. Moore; Schuyler, W. F. Mitchell; Stoddard, T. C. Allen; Vernon, G. B. Todd; Warren, E. A. Fluesmeier.

On motion of Dr. F. J. Lutz, the reading of the minutes of previous meeting was dispensed with excepting those abstracts pertaining to unfinished business.

The secretary read that section of the minutes referring to the publication of the proceedings in journal form.

At the request of Dr. Lutz the secretary read the resolution on appropriations.

The secretary also read the resolution on the importance of legislation by the General Assembly relative to provision for the care and treatment of consumptive persons.

The minutes were approved.

Moved by Dr. J. D. Seba, of Bland, seconded by Dr. Woodson Moss, Columbia, that a committee be appointed to consider necessary changes in the constitution and by-laws.

The secretary read the report of the Committee on Scientific Communications (see page 49).

On motion the report was received and adopted.

The report of the Publication Com-

mittee was read and adopted (see page 50).

The secretary read his report (see page 45).

Dr. Burke, of Moniteau county, asked the House to define his position in view of the fact that the treasurer had failed to receive the dues from the local organization, which dues, however, had been paid into the hands of the proper authority of the local society in December.

Dr. Ferguson, of Pettis county, called attention to the fact that the number of meetings, and the number of scientific communications presented at the meetings of the Pettis County Medical Society had not been mentioned in the secretary's report.

On motion of Dr. Woodson Moss, of Columbia, the matter of adjusting these corrections was placed in the hands of the secretary, treasurer and president.

On motion of Dr. Gore, the secretary's report, with corrections, was received and adopted and the thanks of the association tendered to the secretary.

On motion adjourned to 2 o'clock.

#### AFTERNOON SESSION.

The House of Delegates was called to order at 2 o'clock, by the president.

The chairman of the Committee of Arrangements reported that ample accommodations had been provided for the meeting of the association and invited the members to attend the banquet at the Benton Hotel at 8:30 P. M., Wednesday, when the president's address would be delivered.

On motion the report was accepted and the thanks of the association

tendered the Committee of Arrangements.

The secretary presented a letter from Dr. McCormack, of the American Medical Association, with reference to his recent visit to Missouri.

The secretary read a letter from the secretary of the Crawford County Society. The communication was referred to the Judicial Council.

The president announced the names of the Committee on Amendments to Constitution and By-Laws, as follows:

Frank J. Lutz, St. Louis; Woodson Moss, Columbia; Herman E. Pearse, Kansas City; M. P. Overholser, Harrisonville; O. B. Campbell, St. Joseph.

The report of the Committee on Public Policy and Legislation was made by Dr. F. J. Lutz. On motion the report was accepted.

Dr. Woodson Moss moved that the president be added to the Committee on Amendments to Constitution and By-Laws. Seconded and carried.

Dr. O. B. Campbell moved that the Committee on Scientific Communications be made by nominations from the floor. Seconded and carried.

It was moved by Dr. J. D. Seba that the Committee on Scientific Communications, before publishing the program, should present the same to the president of the association for his approval. Motion lost.

The Committee on Scientific Communications was elected as follows: The Secretary, C. M. Nicholson, chairman *ex-officio*, E. L. Chambliss, Kansas City, and A. R. Kieffer, St. Louis.

On motion of Dr. D. C. Gore, of Marshall, a committee of three was appointed by the chair to select a

Nominating Committee. The president appointed D. C. Gore, Saline County, M. P. Overholser, Cass county, O. B. Campbell, Buchanan county.

The House proceeded to elect the Committee on Public Policy and Legislation with the following result: F. J. Lutz, St. Louis; W. S. Allee, Olean; Herman E. Pearse, Kansas City.

The terms of Jabez N. Jackson and W. B. Dorsett, delegates to the American Medical Association having expired, they were, on motion, reelected.

On motion of Dr. Kieffer alternate delegates to the American Medical Association were elected as follows: J. D. Griffith of Kansas City; W. S. Allee of Olean.

Dr. Pearse for the Committee on Public Policy and Legislation asked for instructions.

Dr. Thrailkill, Kansas City, moved that the committee be instructed to recommend to the governor appointments for the State Board of Health. Motion lost.

Dr. J. D. Brummall moved that the committee be empowered to inangurate such legislation as it might think fit which, after approval by the society, they should endeavor to carry through. Seconded and carried.

Dr. W. G. Moore presented the following motion: That it is the sense of this society that each package of medicine sold or given away in the state of Missouri bear a label on it expressing its exact contents, liquid or solid. Seconded and carried.

Moved by Dr. Funkhouser that the Committee on Public Policy and Legislation be authorized to consider the framing of a bill, to be introduced at

the next legislature, to determine who shall be competent to serve as experts and such other matter which may appertain to the subject of expert testimony. Seconded and carried.

On motion the house took up the consideration of the next place of meeting.

An invitation to visit Jefferson City in 1906 was read.

On motion of Dr. Moss, of Columbia, Jefferson City was nominated.

On motion of Dr. Allee, of Olean, the invitation of Jefferson City was accepted.

The committee appointed to select a nominating committee reported as follows:

F. J. Lutz, O. B. Campbell, J. D. Brummall, Thomas Chowning, W. G. Moore, W. J. Ferguson, W. B. Dorsett, E. H. Thrailkill, R. L. Johnson, J. L. Thorpe.

On motion, adjourned to 8 P. M.

#### EVENING SESSION.

The House was called to order by the president at 8:30 P. M.

The president introduced Dr. Bowers of Wichita, Kansas, president of the Kansas State Medical Association.

On motion of Dr. J. D. Seba, of Bland, the secretary was instructed to send a telegram of congratulations and good wishes to the secretary of the Illinois State Medical Association.

The secretary made a partial report of the work of the Judicial Council, reading the resolution passed by that body relative to the payment of dues by local societies.

On motion, adjourned to meet Wednesday morning at 8:30.



SECOND DAY, MAY 17, 1905.

MORNING SESSION.

The House was called to order by the president at 9 o'clock.

The chairman of the Judicial Council presented the report of the Council.

On motion, the report was adopted.

Dr. V. P. Blair called attention to the fact that the St. Louis Medical Society did not have an accurate representation in the House, owing to the fact that about one hundred members pay their dues after the first of April, when the roster was made up for the State Association and upon which the representation was based. He offered a resolution whereby the St. Louis Medical Society would be allowed a representation on the basis of the entire membership at the time of the meeting of the State Association.

Seconded by Dr. D. C. Gore.

Motion lost.

The secretary said it was not a question of whether the money was paid before or after the annual meeting. According to the action of the Judicial Council, the State Association must be paid for every member paying dues into the St. Louis Medical Society or other local society, the amount being forwarded by the local society to the State Association. He offered a motion to the effect that prior to the annual meeting every affiliated society report to the State Association every member who has paid dues, and forward the full amount of dues; and for every member who pays after the annual meeting dues be at once forwarded to the State Association.

Dr. Dorsett, St. Louis, asked if

that meant that the money must be paid by the first of January.

Dr. Nicholson said it meant that the dues must be paid as soon as members pay the local society.

Motion seconded and carried.

The president stated that this motion merely provided that if a man was in arrears, and that man should pay say five days after the first day of April, the secretary of his society should forward the amount to the State Association; the delinquent member would then be entitled to membership in the State Association.

The president read a communication from the leader of the Excelsior Springs Choral Club, inviting the Association to a musicale to be given that afternoon.

On motion, the thanks of the Association were tendered the choral club, with the request that the entertainment be given at 7:30 in the evening.

The secretary announced that a telegram had been sent to the Illinois State Medical Association extending fraternal greetings and wishing them a successful meeting.

On motion, adjourned to meet Thursday morning at 8:30.

THIRD DAY, MAY 18, 1905,

MORNING SESSION.

The House was called to order by the president at 8:45 A. M.

The Auditing Committee reported as follows:

We, the undersigned committee appointed to audit the accounts of Dr. J. F. Welch, treasurer of the Missouri State Medical Association, beg leave to submit the following report, this report dating from January 1, 1904, to May 15, 1905:

Balance on hand January 1, 1904 ... \$770 75  
 Since collected ..... 5,953 20

Total on hand with receipts ... \$6,723 95  
 Disbursements from Jan. 1st to date 2,589 94

Balance in treasury ..... \$4,134.01

(Signed) FRANK B. HILLER,  
 J. D. BRUMMALL,  
 M. P. OVERHOLSER,  
 Auditing Committee.

On motion the report of the committee was received and adopted.

Dr. E. A. Donelan, of St. Joseph, presented the following resolution:

"Whereas, It is the duty of medical societies and boards of health to take an interest in arresting the spread of disease, and

"Whereas, There are many cases of incipient consumption in our public schools, also parochial and private schools, that are not detected in the first stage of the disease by superintendent, principal or teachers; therefore, be it

"Resolved, That the school boards of all our cities appoint medical examiners to visit the schools and examine all children who are not in good health and, where necessary, send them to their family physicians for treatment; be it further

"Resolved, That this convention favor the establishment by the state of a sanitarium for consumptives, where all can be treated who have not the necessary advantages at home."

On motion, the resolution was adopted.

Dr. Wm. Porter, St. Louis, moved that a committee of five be appointed by the chair whose duty it should be to report as a committee of this association to the United States postoffice department such advertisements of

secret and proprietary medicines as seem fraudulent. Seconded and carried.

The president appointed on this committee W. B. Dorsett, St. Louis; Woodson Moss, Columbia; T. F. Lockwood, Butler; E. A. Donelan, St. Joseph; J. D. Seba, Bland.

Dr. Dorsett, on behalf of the three delegates to the American Medical Association, asked for instructions regarding certain matters, and suggested the appointment of a committee to draft resolutions covering the subject matter of Dr. Moore's paper to be presented through the House of Delegates to the American Medical Association.

Moved by Dr. Woodson Moss that the three delegates be instructed to prepare a resolution embodying the sentiments expressed in Dr. Moore's paper. Seconded and carried.

The secretary presented a motion as follows:

Moved that the House of Delegates instruct the Committee on Scientific Work that there be at least two sections at the meeting next year, and

Moved that the House of Delegates instruct the Committee on Scientific Work to request affiliated societies to furnish their pro rata of papers.

The first section of Dr. Nicholson's motion was seconded and carried, with the understanding that this was not to be a permanent arrangement unless it was found satisfactory.

Dr. Woodson Moss moved that the association have two orations, one in medicine and one in surgery, in addition to the president's address. Seconded and carried.

On motion of Dr. Moss, the House of Delegates proceeded to elect the

orators. Dr. W. G. Moore, St. Louis, was elected orator on internal medicine, and Dr. C. H. Wallace, St. Joseph, was elected orator on surgery.

The second section of Dr. Nicholson's motion was then taken up.

Dr. W. S. Allee moved to amend Dr. Nicholson's motion to the effect that the Committee on Scientific Work invite county societies to furnish a list of members who desire to present papers at the annual meeting. Seconded.

The president stated the motion, as amended by Dr. Allee, as follows:

That the chairman of the Committee on Scientific Communications request each affiliated county society in the state, before October 1, 1905, to furnish a list of those members who are to present papers. Seconded and carried.

Dr. Campbell, of St. Joseph, presented the report of the Committee on Amendments to the Constitution and By-Laws:

Changing the by-laws as follows: Section 3, chapter 6, line 7, page xxx, substitute the words "Chairman of the Judicial Council" for the word "President."

Change chapter XIII to chapter XIV.

Insert chapter XIII to read as follows: No official entertainment shall be accepted by this association during its annual sessions.

On motion, the report was adopted.

The secretary announced the receipt of the following telegram from Edmund H. Weiss, secretary of the Illinois State Medical Association:

The Illinois State Medical Society, in convention assembled, salutes its sister organization of Missouri and bids it Godspeed.

(Signed) E. H. WEISS,  
Secretary.

The secretary was instructed to send a telegram of good wishes to the secretary of the Iowa State Medical Association.

Dr. Jackson, of Columbia, presented the report of the Committee on Medical Education.

On motion, the report was received and ordered published.

The chairman of the Committee on Nominations announced the names of the vice-presidents, as follows: C. D. Avery, Lincoln county; J. P. Burke, Moniteau county; F. A. Glasgow, St. Louis city; T. F. Lockwood, Bates county; E. Lowrey, Clay county.

On motion, the report of the committee was accepted.

It was moved by Dr. Moss that 3,000 copies of the constitution and by-laws be published in pamphlet form for distribution among the state societies. Seconded and carried.

On motion, adjourned.



## MINUTES OF THE JUDICIAL COUNCIL.

TUESDAY, MAY 16TH.

The Judicial Council was called to order at 4:25 P. M., Dr. F. J. Lutz in the chair.

The secretary read the roll call, all the members responding except Dr. Hypes.

The minutes of the previous meeting were read and approved.

The treasurer's report was read and referred to an auditing committee consisting of F. B. Hiller, J. D. Brummall, M. P. Overholser.

Dr. Moss moved that the treasurer's report be published in detail.

Seconded and carried.

The secretary called the attention of the Council to the fact that according to the by-laws dues must be forwarded by each society by the first of April, but after that date additional members were taken into the societies. The secretary asked for information as to what action should be taken in the case of four societies who refused to forward dues for members who had paid after the first of April.

After discussion by Drs. Brummall, Miller, Moss, Dorsett, Wallace and Lutz, Dr. Dorsett presented the following resolution:

*“Resolved, That each delegate and councillor is hereby instructed to call to the attention of county societies chapter xi of the by-laws, and instruct county societies that dues of \$2 for each member must be paid into the treasury of the state society, whether the payment to the county society is made before or after the first of April.*

Motion was seconded and carried.

The chairman of the Council presented his report as follows:

The most important things which have come before the Judicial Council during the past year were, first, the indefinite settlement of the much discussed, but very simple, question concerning the composition of the State Medical Association. The Council is glad to be able to report that the district societies, as component parts of the State Association, have been universally dissolved, and in their stead hyphenated county societies have been established wherever it is supposed that county societies cannot be organized at present. It is interesting to observe how our views have changed in regard to the possibility of creating county societies during the past year. In many instances the supposed impracticability has been readily overcome and flourishing county societies have been established. In this connection the missionary labor performed by Dr. McCormack, under the direction of the American Medical Association, cannot be overestimated, and it is much to be regretted that the time which he could devote to this state was so short and had to be curtailed after the original itinerary had been mapped out.

Although some eighty-four county societies exist throughout the state, many of these are not as yet in working order. County society organization is too young to expect the full fruition of their existence to be observable. Much remains to be done. The organization of the county society is only the beginning of the work

which should be done. The scientific work as well as the discussion of the interests of the physicians resident in the county, the question of their material and professional advancement, their influence in the body politic, are all subjects which should be taken up under proper direction in the county society and should form the object of solicitous care on the part of the councillors.

The division of the state into councillor districts as now constituted is not, in my judgment, the most practical and should be modified in such a way as to make the district assigned to a councillor accessible.

When the Association voted last year to publish a monthly journal, the committee to whom this work was entrusted entered into negotiations with Dr. Otho F. Ball for its publication. The contract which I signed as chairman of the Judicial Council for the Association is hereby submitted as part of this report. In order to enter into this contract it became necessary that the Association have legal existence, and in accordance with your instructions of May 20, 1904, the chairman of the Judicial Council perfected the incorporation of the Association through Mr. Morton Jourdan, who very courteously placed his services at the disposal of the Association gratuitously.

I would suggest that the Association present to him a formal acknowledgment of our appreciation.

On motion, the report was accepted.

Dr. Brummall moved that the Association tender its thanks to the Hon. Morton Jourdan for his kind assistance.

Seconded and carried.

On motion of Dr. Moss, the Council proceeded to consider the matter of redistricting the state.

The chairman advised that the number of districts be increased so that some of the larger ones could be divided into districts more easily looked after.

Dr. F. B. Hiller suggested the advisability of arranging the districts in such manner as to make them accessible by railroad.

After discussion it was decided to postpone action until after the evening session.

Dr. Nicholson moved that the name of the JOURNAL be changed to "THE MISSOURI MEDICAL JOURNAL."

Motion lost.

Motion was made to omit all titles except the superscription, in connection with the names of authors of papers published in the JOURNAL.

Seconded and carried.

It was moved, seconded and carried that the Council forbid the publishing of advertisements in the program of the annual meetings of the association.

On motion, adjourned to meet after the closing session of the House of Delegates.

#### EVENING SESSION.

The Council was called to order by the chairman, Dr. F. J. Lutz, at 9 P. M.

The redistricting of the state was taken up and the districts arranged as follows:

The first, second, third, fourth and fifth districts were left unchanged.

Sixth District—Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh—St. Louis, Lincoln.

Eighth—Franklin.

Ninth—Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

Tenth—Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh—Cape Girardeau, Bollinger, Scott, Madison.

Twelfth—Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth—Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Hickory, Cooper.

Fourteenth—Jackson, Cass, Bates, Johnson.

Fifteenth—McDonald, Newton, Jasper, Dade, Barton, Cedar, Vernon.

Sixteenth—Dallas, Crawford, Phelps, Pulaski, Laeade, Dent.

Seventeenth—Greene, Christian, Stone, Barry, Lawrence, Webster, Polk, Taney.

Eighteenth—Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

Moved and seconded that the council recommend to the House of Delegates the subdivision of the state according to the scheme here adopted, and that three new councilors be elected. Carried.

It was moved and seconded that Dr. B. M. Hypes, St. Louis, be assigned to the ninth district. Carried.

On motion Dr. J. D. Porterfield, jr., of Cape Girardeau, was elected councillor for the eleventh district.

On motion Dr. H. C. Shuttee, of Howell county, was elected councillor for the eighteenth district.

Moved, seconded and carried that

the secretary be instructed to confer with Dr. Tefft, of Springfield, as to a suitable councilor for the seventeenth district.

Moved and seconded that the chairman be ordered to visit every county once during the year. Carried.

Dr. Snyder moved to recommend that the House of Delegates elect the new councillors for a period of five years. Seconded and carried.

Reports from the councillors were then called for and submitted. Reports were made by all the councillors except Dr. Hypes, of the ninth district, who was not present. The work done during the past year was reviewed and suggestions made for facilitating the work during the next year.

The secretary reported that a society in the second district had paid dues which had been credited to 1904, though the councillor insisted that said dues were intended for 1905, and asked the wishes of the Council in the matter.

It was moved that in the case of this society the dues apply on the year 1905. Seconded and carried.

The chairman directed attention to the fact that some of the councillors had not presented their bills to the Council for expenses incurred in the work of organizing county societies.

On motion the report of the Auditing Committee was postponed until the following day.

Adjourned to meet Wednesday morning at 8:15.

WEDNESDAY, MAY 17TH.

The Council was called to order at 8:30 by the chairman.

The report of the Auditing Committee was called for, but inasmuch



as the treasurer's report was for the year January 1, 1904, to January 1, 1905, the report was referred back to the committee with instructions to make report up to May 15, 1905.

On motion of Dr. Wallace the Council proceeded to elect three members of the Council as assistants to the secretary, Chairman, ex-officio, of the Publication Committee.

On motion the three councillors from St. Louis, Drs. F. J. Lutz, B. M. Hypes and W. B. Dorsett, were elected to serve on this committee.

On motion the three St. Louis councillors, Drs. Lutz, Hypes and Dorsett, were appointed the Executive Committee of the Judicial Council.

Moved and seconded that Dr. H. C. Shuttee, of West Plains, be recommended to the House of Delegates as councillor for the eighteenth (West Plains) district. Carried.

Moved and seconded that Dr. J. E. Tefft, of Springfield, be recommended to the House of Delegates as councillor for the seventeenth (Springfield) district. Carried.

Councillors were assigned to districts as follows: First district, F. B. Hiller; second, J. D. Brummall; third, E. H. Miller; fourth, C. H. Wallace; fifth, L. W. Dallas; sixth, Woodson Moss; seventh, W. B. Dorsett; eighth, F. J. Lutz; ninth, B. M. Hypes; tenth, J. J. Norwine; eleventh, J. D. Porterfield, jr.; twelfth, W. S. Allee; thirteenth, R. D. Haire; fourteenth, M. P. Overholser; fifteenth, A. R. Snyder; sixteenth, R. L. Johnson; seventeenth, J. E. Tefft; eighteenth, H. C. Shuttee.

On motion the Judicial Council instructed the treasurer to deposit the funds of the association in his home

bank provided the bank would pay 3 per cent. on the daily balance and furnish the association a bond guaranteeing the safety of the funds while in the bank, or, in the event of his inability to make such arrangement, the Judicial Council, through its executive Committee, shall carry out the idea of the Council. The treasurer was instructed to deliver the treasurer's bond to the Chairman of the Judicial Council.

On motion Dr. C. M. Nicholson was re-elected secretary, Dr. E. J. Goodwin assistant secretary, Dr. J. Franklin Welch treasurer.

On motion adjourned.

#### THURSDAY, MAY 18TH.

The Judicial Council was called to order at 1 o'clock, Dr. W. S. Allee in the chair.

Dr. Nicholson tendered his resignation as editor of the *Journal*.

Dr. Dallas asked Dr. Nicholson if he could name a suitable man to take his place.

Dr. Nicholson suggested the name of Dr. E. J. Goodwin, assistant secretary.

Dr. Brummall said the Council thoroughly endorsed the management of the *Journal* as it had been carried out by Dr. Nicholson, and advised that Dr. Goodwin be made associate editor to relieve Dr. Nicholson in connection with the *Journal*, Dr. Nicholson to retain the position of editor and control the policy of the *Journal*.

Dr. Moss suggested that the resignation of Dr. Nicholson be taken under advisement, that the thanks of the association be extended to Dr. Nicholson and that Dr. Goodwin be elected associate editor.

It was moved by Dr. Brummall, seconded by Dr. Moss, that Dr. Nicholson be asked to withdraw his resignation.

Dr. Nicholson's resignation was withdrawn, and it was then moved by Dr. Brummall, seconded by Dr. Moss, that Dr. Nicholson be elected editor-in-chief of the *Journal* for the ensuing

year, that he be responsible for the policy of the *Journal* and that Dr. Goodwin be elected associate editor, with the understanding that he relieve Dr. Nicholson of the work in so far as possible, and that Dr. Goodwin be allowed the sum of \$50 per month to cover stenographer's salary. Carried.

On motion, adjourned.

## MINUTES OF THE GENERAL SESSION.

### SECOND DAY—MORNING SESSION.

The meeting was called to order by the president, Dr. Jackson, at 10:20 A. M.

Dr. Rice, vice-chairman of the Committee on Arrangements, introduced Rev. John H. Hubbard, of Excelsior Springs, who delivered the invocation.

Dr. Rice then announced that the members of the association would be entertained at 7:30 P. M. by the Excelsior Springs Choral Club, and that a banquet would be tendered them at 8:30 P. M. at the Benton House.

The Rev. Mr. Kinney, of Excelsior Springs, delivered the address of welcome, which was responded to by Dr. W. G. Moore, of St. Louis.

Dr. F. J. Lutz, St. Louis, read a paper entitled "The Limitations of Rest in the Treatment of Traumata."

Discussion by Dr. A. R. Kieffer, St. Louis; Dr. John C. Morfit, St. Louis; Dr. H. M. Grace, Chillicothe; Dr. M. B. Clopton, St. Louis; Dr. A. L. Fulton, Kansas City; Dr. C. H. Wallace, St. Joseph; Dr. Robert M. Funkhouser, St. Louis; Dr. E. Von Quast, Kansas City; Dr. A. W. McAles-ter, Columbia.

Dr. William Porter, St. Louis, read a paper entitled "Tuberculosis; a

Problem for the General Practitioner."

Discussion by Dr. W. G. Moore, St. Louis; Dr. J. R. Lemen, St. Louis; Dr. John D. Seba, Bland; Dr. J. A. Larrabee, Barnard; Dr. J. D. Brummall, Salisbury.

It was moved by Dr. J. W. Kyger, Kansas City, that it was the sense of the Missouri State Medical Association that each county society appoint a committee on tuberculosis to act in conjunction with each other in this matter. Seconded and carried.

On motion adjourned to 1:30 P. M.

### AFTERNOON SESSION.

The meeting was called to order at 1:45 P. M., President Jackson in the chair.

Dr. A. J. Steele, St. Louis, read a paper entitled "The Present Status of Orthopedic Surgery."

Discussion by Dr. J. F. Binney, Kansas City; Dr. J. H. Tanquary, St. Louis; Dr. E. E. Edmonson, Kansas City.

D. L. W. Dallas, Hunnewell, read a paper entitled "Some Permanent Sequelæ of Grip."

Discussion by Dr. J. M. Allen, Liberty; Dr. T. E. Potter, St. Joseph;

Dr. L. J. Dandurant, St. Joseph; Dr. Roland Hill, St. Louis; Dr. J. L. Jones, Linden; Dr. J. A. Larrabee, Barnard.

It was moved that the papers of those gentlemen who were on the program but not present be accepted. Seconded and carried.

Dr. W. G. Moore read a paper on "The Present Status of Therapeutics."

Discussion by Dr. J. R. Lemen, St. Louis; Dr. William Porter, St. Louis; Dr. L. W. Dallas, Hunnewell; Dr. Bransford Lewis, St. Louis; Dr. J. W. Kyger, Kansas City; Dr. J. M. Allen, Liberty; Dr. W. T. Elam, St. Joseph; Dr. L. J. Dandurant, St. Joseph; Dr. Wm. F. Kuhn, Kansas City; Dr. O. B. Campbell, St. Joseph; Dr. E. W. Schaufler, Kansas City; Dr. J. Block, Kansas City.

Dr. William Porter, of St. Louis, presented a motion on the subject-matter under discussion, which was referred to the House of Delegates. The paper was further discussed by Dr. J. D. Seba, of Bland.

Dr. Bransford Lewis read a paper on "Urinary Stone: Its Diagnosis and Treatment."

Discussion by Dr. Ernest G. Mark, Kansas City; Dr. H. J. Scherck, St. Louis; Dr. C. F. Roberts, Dr. C. J. Morrow, Kansas City; Dr. L. J. Dandurant, St. Joseph.

Dr. J. R. Lemen, St. Louis, read a paper on "Hypertrophy of the Heart Without Valvular Disease."

Discussion by Dr. T. F. Lockwood, Butler; Dr. I. J. Wolf, Kansas City; Dr. J. W. Dean, Maryville.

Dr. A. R. Kieffer, St. Louis, read a paper on "Uterine Displacement."

Discussion by Dr. W. T. Elam, St.

Joseph; Dr. Frank A. Glasgow, St. Louis; Dr. J. A. Larrabee, Barnard. On motion, adjourned.

### THIRD DAY—MORNING SESSION.

The meeting was called to order at 10:10 A. M. by the president.

It was moved that the election of a president be taken up, and, on motion, the members cast an informal ballot, the two receiving the highest number of votes to be declared the nominees for president.

Dr. C. H. Wallace, of St. Joseph, and Dr. D. C. Gore, of Marshall, by the informal ballot were put in nomination.

Dr. Wallace withdrew and moved that the rules be suspended and the secretary be instructed to cast a unanimous ballot for Dr. Gore. Seconded and carried.

Dr. Gore was conducted to the chair and thanked the members of the association for the honor they had conferred upon him.

Dr. C. Lester Hall, of Kansas City, read a paper on "The Abdominal vs. the Vaginal Route in Pelvic Surgery."

Discussion by Dr. W. T. Elam, St. Joseph; Dr. O. B. Campbell, St. Joseph; Dr. Katherine Richardson, Kansas City; Dr. W. B. Dorsett, St. Louis; Dr. Frank Glasgow, St. Louis; Dr. Thomas J. Beattie, Kansas City; Dr. L. J. Dandurant, St. Joseph; Dr. J. F. Binney, Kansas City; Dr. A. H. Cordier, Kansas City; Dr. St. E. Sanders, Kansas City; Dr. J. A. Robertson, Kansas City; Dr. Smith, St. Joseph.

The secretary read a telegram of congratulations from the secretary of the Iowa State Medical Association,



and a similar telegram from the Illinois State Medical Society.

Dr. W. B. Dorsett, of St. Louis, read a paper on "Transfusion."

Discussion by Dr. H. S. Crossen, St. Louis; Dr. C. A. Ritter, Kansas City; Dr. J. A. Larrabee, Barnard; Dr. T. C. Boulware, Butler; Dr. John D. Seba, Bland; Dr. C. H. Wallace, St. Joseph; Dr. Frank Glasgow, St. Louis; Dr. W. T. Elam, St. Joseph; Dr. W. U. Kennedy, St. Louis; Dr. Dandurant, St. Joseph.

Adjourned to meet at 1:30 P. M.

#### AFTERNOON SESSION.

The meeting was called to order at 1:45 P. M. by the president.

Dr. H. C. Dalton, St. Louis, read a paper on "Mistakes in Diagnosis of Appendicitis."

Discussion by Dr. J. F. Binney, Kansas City; Dr. E. W. Schaufler, Kansas City; Dr. J. A. Larrabee, Barnard; Dr. Herman E. Pearse, Kansas City; Dr. J. M. Allen, Liberty; Dr. St. E. Sanders, Kansas City.

Dr. John Punton, Kansas City, read a paper entitled "Neurasthenia; Its Complications and Treatment."

Discussion by Dr. D. S. Booth, St. Louis; Dr. C. R. Woodson, St. Joseph; Dr. J. M. Allen, Liberty.

Dr. Roland Hill, St. Louis, read a paper entitled "Benign Tumors of the Breast."

Discussion by Dr. E. A. Babler, St. Louis; Dr. John C. Morfit, St. Louis.

Dr. T. F. Lockwood, Butler, read a paper on "The Science of Medicine a Looted Profession."

Discussion by Dr. W. G. Moore, St. Louis; Dr. J. D. Brummall, Salisbury.

Dr. E. A. Babler, St. Louis, read a paper entitled "Rectal Palpation."

Dr. T. N. Bogart, Excelsior Spring, read a paper on the "Use and Abuse of Massage."

Discussion by Dr. J. D. Seba, Bland; Dr. W. B. Dorsett, St. Louis.

Dr. B. M. Hypes, St. Louis, read a paper on "Hydatiform Mole."

Discussion by Dr. H. S. Crossen.

The paper by Dr. R. L. Johnson, Rolla, was read by title because of the lateness of the hour and the absence of the gentlemen who were to have discussed it.

On motion of Dr. J. D. Seba moved that a vote of thanks be extended to the officers for their services during the year. Seconded and carried.

Dr. Jackson extended to the members of the association his thanks for their co-operation during the year.

It was moved by Dr. Halley that a vote of thanks be extended to the members of the profession of Clay county, and particularly those residents of Excelsior Springs who had made their visit one of pleasure and gratification. Seconded and carried.

On motion adjourned *sine die*.

#### REPORT OF THE SECRETARY.

*To the President and Members of the State Medical Association:*

GENTLEMEN—I have the honor of making the following report for the year just ended. In accordance with instructions of this body I had printed 2,000 copies of the president's address, 1,400 of which were mailed from the secretary's office to physicians of the state not members of the association. During the year the card index has been added to materially and at this time contains a record of 5,960 names and addresses of physicians of the state with about 1,400

auto biographies of members of the association. Immediately after the last annual meeting a list of the members of the various societies were forwarded to the secretaries requesting correction and the corrected list furnished to the publication committee for the July issue of the journal. Packages containing constitutions and by-laws, roster blanks, blanks for permanent record, applications for membership and blank applications for charter were sent to all councillors and the secretaries of prospective societies. A large number of letters have been written physicians of unorganized counties notifying them of meetings to be held by the councillor of the district. Copies of the journal have been forwarded to physicians of all counties where societies were to be organized when so requested by the councillor of the district and it is in this way the secretary of the association has been of much assistance to the various members of the judicial council. Charters have been issued to the following societies: Adair, Atchison, Barton, Bates, Carroll, Clinton, Cooper, Crawford, Current River, Dunklin, Grundy, Iron, Jefferson, Johnson, Lafayette, Lincoln, Livingston, McDonald, Madison, Maries, Mercer, Monroe, Newton, Pemiscot, Perry, Phelps, Ralls, Ray, Saline, Ste. Genevieve, Scotland, Stoddard, Shelby, Warren, Washington, Wayne and St. Louis County.

The secretary has received the fol-

lowing dues for 1905-06, same having been forwarded to the treasurer whose receipt is now on file: Andrew, \$34; Greene, \$56; Adair, \$14; Atchison, \$8; Audrain, \$38; Barton, \$24; Bates, \$30; Boone, \$54; Buchanan, \$130; Butler, \$22; Caldwell, \$42; Callaway, \$40; Camden, \$18; Cape Girardeau, \$30; Carroll, \$16; Cass, \$52; Chariton, \$40; Clark, \$20; Clay, \$52; Clinton, \$20; Cole, \$28; Cooper, \$36; Crawford, \$14; Current River, \$2; Davies, \$26; Dunklin, \$40; Grundy, \$26; Henry, \$34; Holt, \$32; Howard, \$32; Howell, \$28; Iron, \$10; Jackson, \$410; Jasper, \$50; Jefferson, \$44; Johnson, \$40; Knox, \$16; Laclede, \$24; Lafayette, \$32; Lincoln, \$16; Linn, \$50; Livingston, \$54; McDonald, \$18; Macon, \$48; Madison, \$20; Marion, \$36; Mercer, \$10; Miller, \$20; Mississippi, \$18; Moniteau, \$34; Monroe, \$38; Morgan, \$16; Newton, \$44; Nodaway, \$58; Pemiscot, \$22; Perry, \$22; Pettis, \$74; Phelps, \$16; Pike, \$12; Platte, \$32; Putnam, \$4; Ralls, \$32; Randolph, \$28; Ray, \$30; Reynolds, \$16; Saline, \$6; St. Clair, \$14; Ste. Genevieve, \$20; St. Louis, \$684; St. Louis County, \$42; Schuyler, \$14; Scotland, \$20; Shelby, \$24; Stoddard, \$20; Sullivan, \$12; Warren, \$16; Washington, \$10; Wayne, \$20; Vernon, \$30; Franklin, \$24; Montgomery, \$14; St. Charles, \$22; Gasconade-Maries-Osage, \$12; Pulaski, \$18; total, \$3,204.

Name of Society.	Council- lor Dis- trict.	Date of Meetings.	Meetings During '04.	Scientific Communi- cations.	Members '04.	Members '05.
Adair .....	1	Quarterly.....	0	0	6	7
Andrew .....	4	Monthly.....	0	0	0	17
Atehison .....	4	Quarterly.....	*	*	5	4
Audrain.....	6	Monthly.....	8	5	14	19
Barton .....	14	Monthly.....	0	0	0	12
Bates .....	13	Quarterly.....	1	0	0	15
Boone .....	6	Monthly.....	9	10	27	27
Buchanan .....	4	Semi-monthly..	17	36	61	65
Butler .....	10	Weekly.....	30	11	11	11
Caldwell.....	3	Quarterly.....	4	8	16	21
Callaway.....	6	Monthly.....	5	5	19	20
Camden.....	11	Quarterly.....	*	*	6	9
Cape Girardeau.....	9	Monthly.....	..	..	0	15
Carroll.....	2	Monthly.....	0	0	16	8
Cass .....	13	Quarterly.....	4	8	27	26
Chariton .....	2	Monthly.....	10	7	21	20
Clark .....	1	Quarterly.....	3	0	11	10
Clay .....	3	Monthly.....	9	21	31	26
Clinton .....	3	Monthly.....	0	0	0	10
Cole .....	11	Quarterly.....	3	0	17	14
Cooper .....	12	Monthly.....	5	5	6	18
Crawford .....	8	Quarterly.....	0	0	0	0
Carter-Shannon.....	..	Quarterly.....	2	2	10	1
Daviess.....	3	Quarterly.....	3	8	16	13
Dunklin.....	10	Monthly.....	0	0	0	20
Franklin.....	8	Monthly.....	0	0	0	12
Greene .....	15	Monthly.....	0	0	0	28
Gasconade-Maries-Osage	..	Monthly.....	..	...	..	6
Grundy.....	2	Quarterly.....	4	0	13	13
Henry .....	12	Monthly.....	3	3	16	17
Holt.....	4	Quarterly.....	4	7	16	16
Howard .....	6	Monthly.....	5	5	17	16
Howell.....	16	Semi-monthly..	6	14	14	14
Iron .....	10	Monthly.....	4	4	7	5
Jackson .....	13	Semi-monthly..	20	35	183	205
Jasper .....	14	Semi-monthly..	18	23	25	25
Jefferson.....	10	Monthly.....	0	0	0	22
Johnson.....	12	Quarterly.....	3	4	28	20
Knox .....	1	Monthly.....	0	0	0	8
Laclede.....	16	Quarterly.....	2	2	10	12
Lafayette.....	12	Monthly.....	0	0	0	16
Lincoln.....	7	Monthly.....	0	0	0	8
Linn .....	2	Quarterly.....	4	12	25	25
Livingston .....	2	Monthly.....	†	†	0	27
McDonald.....	14	Monthly.....	3	3	9	0
Macon .....	5	Monthly.....	5	3	24	24

\* No report. † No record.



Name of Society.	Council- lor Dis- trict.	Date of Meetings.	Meetings During '04	Scientific Communi- cations	Members '04.	Members '05.
Madison.....	10	Semi-monthly..	10	10	10	10
Marion.....	5	Monthly.....	10	9	21	18
Mercer.....	2	Monthly.....	3	0	5	0
Miller.....	11	Quarterly.....	3	4	10	10
Mississippi.....	10	Monthly.....	4	0	9	9
Moniteau.....	11	Quarterly.....	4	7	20	17
Monroe.....	5	Quarterly.....	*	*	14	19
Montgomery.....	6	Quarterly.....	*	*	0	7
Morgan.....	11	Quarterly.....	2	0	11	0
Newton.....	14	Monthly.....	3	2	22	22
Nodaway.....	4	Monthly.....	4	4	36	29
Pemiscot.....	..	Monthly.....	4	8	14	11
Perry.....	9	Monthly.....	3	0	11	11
Pettis.....	12	Monthly.....	†	†	†	37
Phelps.....	16	Quarterly.....	4	11	12	8
Pike.....	6	Monthly.....	0	0	0	6
Platte.....	3	Monthly.....	12	19	16	16
Putnam.....	2	Monthly.....	6	12	13	2
Pulaski.....	16	None.....	0	0	0	9
Ralls.....	..	Quarterly.....	1	0	12	16
Randolph.....	5	Monthly.....	10	10	19	14
Ray.....	3	Monthly.....	10	12	11	15
Reynolds.....	10	Quarterly.....	0	0	8	8
Saline.....	12	Monthly.....	0	0	6	3
St. Charles.....	7	Monthly.....	0	0	0	11
St. Clair.....	12	Quarterly.....	4	12	8	7
Ste. Genevieve.....	8	Monthly.....	3	0	0	10
St. Louis, City.....	..	Weekly.....	36	43	340	342
St. Louis, County.....	..	Monthly.....	7	8	37	20
Schuyler.....	1	Semi-monthly..	2	4	5	7
Scotland.....	1	Monthly.....	5	0	12	10
Shelby.....	5	Quarterly.....	4	3	14	12
Stoddard.....	10	Monthly.....	4	8	22	10
Sullivan.....	2	Monthly.....	1	0	9	6
Warren.....	6	Monthly.....	0	0	0	8
Washington.....	10	Monthly.....	2	0	5	5
Wayne.....	10	Monthly.....	0	0	11	15
Vernon.....	..	Quarterly.....	0	0	0	15

\* No report. † No record.

On April 1st Dr. J. N. McCormack, organizer for the American Medical Association, held meetings at the following points in the state: DeSoto, Pacific, Jefferson City, Boonville, Sedalia, Springfield, Joplin, Nevada,

Butler, Plattsburg, Savannah, Chillicothe, Moberly, Macon and Hannibal. Two thousand eight hundred and ninety notices were sent to physicians in districts where meetings were held and the result of Dr. McCormack's

visit was most gratifying. Arrangements have been made with the Southwestern Passenger Association and Western Passenger Association for rates of one and one-third fare for round trip to the annual meeting.

Number of counties in state 115, number of societies in affiliation 84, number of county societies organized prior to May, 1904, 39; number of societies organized since May, 1904, 45; number of societies holding meetings during 1904, 54, number of scientific communications read before societies 427, number of societies doing scientific work 54, number of societies whose membership has increased since May, 1904, 12; number of societies whose membership has decreased since 1904, 23, total paid membership May, 1904, 1,321, total paid membership May, 1905, 1,602; gain, 281.

The work of the state secretary greatly increased the necessity of serving typewritten the material for the journal to the Publication Committee each month is not to be underestimated. Press copies of all letters written from the secretary's office have been made and are here for inspection of the House of Delegates and Judicial Council.

The following is a recapitulation of work of this office:

Number of letters mailed 4,242, number of circular letters mailed 2,890, number of president's address mailed 1,400, number of charters sent to societies 37, number of packages mailed 84, number of special delivery letters 16, number of telegrams sent 7, number of journals mailed 210, number of programs mailed 1,722.

The expenses of the office were as follows:

Two-cent stamps for mailing 4,242 letters \$84.84, two-cent stamps for mailing 2,890 McCormack's letters \$57.80, one-cent stamps for mailing president's address \$14.00, two-cent stamps for mailing charters 74 cents, stamps for 84 packages \$9.20, stamps for special delivery letters \$1.60, two-cent stamps for mailing journals \$4.20, one-cent stamps for mailing program \$17.22.

Respectfully submitted,

C. M. NICHOLSON, Secretary.

#### REPORT OF COMMITTEE ON SCIENTIFIC WORK.

*To the President and Members of the State Medical Association:*

GENTLEMEN:—Your Committee on Scientific Work sent out invitations to a number of medical men in the state inviting them to present papers at the annual meeting, and requesting each to furnish an abstract of his contribution and place the original paper in the hands of the committee at least two weeks prior to the annual meeting. As a result there are thirty original contributions on the program. The committee wrote 240 medical men of the state requesting them to take part in discussions, to which 135 replied. Abstracts have been sent to those who are to open the discussions and altogether 165 gentlemen have accepted the committee's invitation and appear on the program.

The program was published in the JOURNAL and advance sheets were sent to the *Medical Fort-Nightly*, *Medical Herald*, *Medical Review* and *Kansas City Medical Index*, so that additional publicity might be given by these periodicals. 2,500 copies of a 42-page program, containing a full list of

members of the association with their address, was published and a copy sent to each member.

The cost of printing and binding was \$112.50. The amount received from advertisers was \$112.50. The letters having been written and mailed from the office of the secretary of the association, the committee has no bill to present. The committee desires to extend its special thanks to Dr. E. J. Goodwin, assistant secretary, for his valuable services in the preparation of the program.

Respectfully submitted,

C. M. NICHOLSON, Chairman.

#### REPORT OF THE PUBLICATION COMMITTEE.

*To the President and Members of the State Medical Association.*

GENTLEMEN:—Your committee on publication hereby makes the following report:

At the last annual meeting, the Judicial Council decided to publish the transactions of the association in the form of a monthly journal to be known as the JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION and appointed a publication committee to conduct the publication.

It was decided the subscription price would be \$2 per year, the publication to be sent free of cost to each member. Your committee made a contract with the Medical Press Company of St. Louis to print the JOURNAL. The material ready for the publication has been received from the secretary of the state association prior to the 22d of each month, and on the 1st of the following month the JOURNAL has been issued. About 2,400 copies have been printed each month

and have been distributed to the members of the state association, paid subscribers, medical libraries, advertisers, and non-members. The JOURNAL has published not only the transactions of the State Medical Association, but papers or abstract of papers from men best known to the medical world. Altogether 61 original articles, 68 abstracts, 37 editorials, 216 news items and 154 "county society notes," from counties in affiliation, tables showing the names of affiliated societies, with officers and dates of meeting and ten pages devoted to medical history, have appeared.

The cost of publishing the transactions of 1904-'05 was \$1,167.50. The cost of publishing the transactions in JOURNAL form 1904-'05 has been \$1,681.56. In conclusion, your committee desires to say that the value of the JOURNAL as a method of maintaining the membership of the State Medical Association cannot be overestimated. Not only does it give all members an opportunity to know just what is done at the annual meeting, but keeps the doctors in different parts of the state in touch with each other and furnishes those medical men who never attend, a *quid pro quo* for their annual contribution.

Respectfully submitted,

C. M. NICHOLSON, Chairman.

#### TREASURER'S ACCOUNT WITH THE MISSOURI STATE MEDICAL ASSOCIATION, 1904.

##### CASH RECEIVED.

<i>Amount Forwarded</i> .....	\$ 770 75
January 1, Miller county .....	16 00
" 1, Howard county .....	34 00
" 1, Camden county .....	8 00
" 1, Morgan county .....	16 00
" 1, Laeledge county .....	22 00



January 13, Johnson county.....	48 00	Sept. 12, Madison county.....	20 00
" 22, Schuyler county.....	10 00	" 19, Cooper county.....	12 00
" 24, Chariton county.....	42 00	Oct. 17, Ralls county.....	16 00
February 6, Howell county.....	26 00	" 18, Mercer county.....	10 00
" 21, Cole county.....	34 00	Nov. 20, Washington county.....	10 00
March 17, Saline county.....	10 00	Dec. 19, Ste. Genevieve county.....	20 00
" 21, Reynolds county.....	16 00		
" 29, Henry county.....	32 00		\$3,664 75
" 30, Randolph county.....	30 00	DISBURSEMENTS.	
April 4, Jasper county.....	54 00	Jan. 9, C. M. Nicholson.....	\$ 1 35
" 4, St. Louis county.....	54 00	" 16, Dr. Simmons, A. M. A.....	1 10
" 4, Platte county.....	32 00	" 25, J. E. Dismukes & Son.....	1 25
" 11, M. M. A.....	4 00	Feb. 12, Modern Print Co.....	1 35
" 12, Audrain county.....	34 00	Mch. 8, C. M. Nicholson.....	1 85
" 14, Moniteau county.....	42 00	" 26, Modern Print Co.....	14 65
" 17, Mississippi county.....	22 00	April 1, Modern Print Co.....	1 75
" 18, Sullivan county.....	16 00	May 10, J. F. Welch, S. & S.....	15 00
" 21, Linn county.....	50 00	" 19, C. M. Nicholson, S. & S.....	97 50
" 21, St. Clair county.....	16 00	" 19, C. M. Nicholson, postage.....	68 88
" 21, Butler county.....	24 00	" 19, C. M. Nicholson, let. pr.....	12 00
" 21, Grundy county.....	26 00	" 19, C. M. Nicholson, salary.....	72 00
" 25, Current River county.....	14 00	" 23, Spalding Sta. Co.....	2 00
" 25, Shelby county.....	30 00	" 23, Miss Edith Strong.....	40 00
" 25, Monroe county.....	28 00	" 23, Dr. Dallas.....	15 00
" 25, Ray county.....	24 00	June 3, Spalding Sta. Co.....	1 00
" 25, Marion county.....	40 00	" 3, Modern Print Co.....	9 50
" 25, Jackson county.....	388 00	" 9, National Surety Co.....	15 00
" 25, Maries county.....	12 00	July 5, Dr. C. D. Cobb.....	2 40
" 28, Daviess county.....	20 00	" 5, Reliance Co. and Ep. Co.....	1 00
" 30, Boone county.....	58 00	" 5, A. M. A.....	9 50
" 30, Clark county.....	22 00	" 5, Globe-Wernicke Co.....	1 50
" 30, John T. Hodgen.....	34 00	" 5, Modern Print. Co.....	18 35
" 30, Nodaway county.....	70 00	" 14, Dr. C. D. Cobb.....	4 35
May 4, Buchanan county.....	122 00	" 16, Interstate Med. Jrl.....	146 12
" 4, Callaway county.....	38 00	Aug. 1, Interstate Med. Jrl.....	15 25
" 7, McDonald county.....	18 00	" 1, Modern Print. Co.....	4 45
" 13, Holt county.....	20 00	" 8, A. R. Fleming Prt. Co.....	12 50
" 14, Cass county.....	56 00	" 9, St. Louis Pho. Eng. Co.....	30 00
" 14, Caldwell county.....	32 00	" 22, Morton Jourdon.....	7 00
" 17, Clay county.....	52 00	" 22, M. K. McGrath.....	50 00
" 17, Phelps county.....	24 00	Sept. 7, Interstate Med. Jrl.....	109 50
" 17, St. Louis City.....	680 00	" 7, Modern Print. Co.....	2 00
" 17, Scotland county.....	24 00	" 14, I. M. Journal Co.....	157 35
" 18, Macon county.....	48 00	" 20, Spalding S. Co., M. N.....	2 00
" 18, Gasconade county.....	10 00	" 20, Ira A. Martin.....	9 00
" 18, Carroll county.....	6 00	Oct. 6, C. M. Nicholson, S. & S.....	100 00
" 21, Atchison county.....	8 00	" 6, C. M. Nicholson.....	1 65
" 22, Pettis county.....	50 00	" 6, Modern Print. Co.....	5 75
June 20, Putnam county.....	26 00	" 18, I. State Med. Jrl.....	139 75
July 1, Stoddard county.....	50 00	Nov. 16, S. D. Cobb.....	1 60
" 11, Crawford county.....	14 00	" 2, S. D. Cobb.....	1 15
" 29, Bates county.....	22 00	" 23, American Med. Asn.....	5 10
Aug. 31, McDowell district.....	14 00	Dec. 3, Edith Strong.....	15 10
" 31, Iron county.....	14 00	" 9, Dr. C. D. Cobb.....	1 00
Sept. 12, Wayne county.....	20 00	" 9, Dr. B. M. Hypes.....	13 89
		" 9, I. Med. Journal Co.....	144 00
		" 10, I. Med. Journal Co.....	146 95
			\$1,529 39
		Dec. 31, Cash on hand.....	2,135 36
			\$3,664 75
		J. FRANKLIN WELCH,	
		Treasurer.	

TREASURER'S ACCOUNT WITH THE MISSOURI STATE MEDICAL ASSOCIATION FROM JANUARY 1ST TO MAY 15, 1905.

## CASH RECEIVED.

Amount Forward	\$2,135 36
Jan. 1, Howard county	32 00
" 1, Cass county	48 00
" 1, Perry county	22 00
" 10, Cape Girardeau county	30 00
" 16, Newton County	44 00
" 14, Holt county	32 00
" 14, Dunklin county	40 00
" 14, Pemiscot county	22 00
" 20, Howell county	26 00
" 20, Marion county	36 00
" 24, Pettis county	74 00
" 26, Adair county	14 00
March 3, Henry county	34 00
" 3, Schuyler county	14 00
" 13, Sullivan county	12 00
" 13, Grundy county	26 00
" 23, Saline county	4 00
" 24, Clark county	20 00
" 24, Johnson county	40 00
April 6, Ralls county	32 00
" 10, Bates county	30 00
" 10, Lafayette county	32 00
" 10, Ray county	30 00
" 10, Mississippi county	18 00
" 2, Shelby county	24 00
" 10, Miller county	20 00
" 10, Jasper county	34 00
" 10, Chariton county	40 00
" 10, Iron county	10 00
" 10, Audrain county	38 00
" 10, Livingston county	54 00
" 12, Monroe county	38 00
" 12, Platt county	32 00
" 12, Boone county	54 00
" 12, Cooper county	36 00
" 12, St. Louis Med. S.	684 00
" 14, Macon county	48 00
" 14, Warren county	16 00
" 14, Jefferson county	44 00
" 14, Atchison county	8 00
" 14, Montgomery county	14 00
" 16, Callaway county	40 00
" 20, St. Clair county	14 00
" 20, Camden county	18 00
" 20, Randolph county	28 00
" 20, Clinton county	16 00

April 20, Daviess county	26 00
" 24, Caldwell county	42 00
" 24, Linn county	50 00
" 24, Laeledge county	16 00
" 25, Scotland county	20 00
" 25, Butler county	22 00
" 27, Andrew county	34 00
" 27, Knox county	16 00
May 1, St. Louis county	38 00
" 1, Cole county	28 00
" 13, Barton county	24 00
" 13, Buchanan county	130 00
" 3, Jackson county	410 00
" 6, Putnam county	4 00
" 6, Laeledge county	24 00
" 8, Carter-Shannon county	2 00
" 8, Phelps county	16 00
" 10, Vernon county	30 00
" 10, Stoddard county	20 00
" 10, Gasconade-M. Osage	12 00
" 14, Franklin county	24 00
" 14, Pike county	12 00
" 14, St. Charles county	22 00
	<hr/> \$5,177 36

## DISBURSEMENTS.

Jan. 5, Mod. Ptg. Co. (ptg.)	\$ 3 85
" 17, G. H. Simmons, A. M. A.	1 50
" 17, Mod. Ptg. Co. (ptg.)	5 75
" 23, I. St. Jr. Co. (p. jr.)	149 70
Feb. 8, Spalding S. Co. (ptg.)	2 90
" 9, Remington T. Co. (one machine)	97 50
" 16, I. S. Jr. Co. (ptg. jr.)	146 15
" 22, Mod. Ptg. Co. (ptg.)	5 00
March 13, G. S. F. Co. (desk)	25 00
" 24, Dr. Nicholson, S. & S.	125 00
April 6, Spalding S. Co. (ptg.)	60
" 11, Spalding S. Co. (ptg.)	2 60
" 14, I. S. Med. Co. (ptg. jr.)	170 00
" 20, Dr. Moss (trav. ex.)	20 32
" 20, Edith Strong (stenog.)	47 00
" 20, Edith Strong (stenog.)	1 50
" 20, Spalding S. Co. (ptg.)	2 10
May 2, Dr. Moss (trav. ex.)	11 48
" 2, Mod. Ptg. Co. (ptg.)	29 25
" 2, Spalding Ptg. Co. (ptg.)	1 50
" 13, I. S. Med. Co. (ptg. jr.)	202 05
	<hr/> \$1,060 55
Cash on hand May 15, 1905	4,116 81
	<hr/> \$5,177 36

J. FRANKLIN WELCH,  
Treasurer.

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# —JOURNAL—

## MISSOURI STATE MEDICAL ASSOCIATION

The official organ of the State Association and Affiliated County Societies. Published monthly under the supervision of the Publishing Committee.

ADDRESS ALL COMMUNICATIONS TO 534 NORTH VANDEVENTER AVENUE, ST. LOUIS.

VOL. II.

JULY, 1905.

No. 1

*C. M. NICHOLSON, M. D., Editor.*  
*E. J. GOODWIN, M. D., Associate Editor.*

### PUBLICATION COMMITTEE:

C. M. NICHOLSON.

F. J. LUTZ.

B. M. HYPES.

WALTER B. DORSETT.

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AUDRAIN COUNTY—C. A. Rothwell, M. D., Mexico.  
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SHELBY COUNTY—L. W. Dallas, M. D., Hunnewell.  
STODDARD COUNTY—Geo. W. Vernon, Dexter.  
SULLIVAN COUNTY—G. S. Milnes, M. D., Milan.

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## EDITORIAL.

### TREATMENT OF FOURTH OF JULY WOUNDS.

The celebration of the Fourth of July by producing noise with cannons, toy pistols and firecrackers has within late years not been confined to the annoyance of the more peaceably inclined, but has resulted in a distinct

and dangerous kind of gunshot wound. By far the largest number of these wounds involve the hands and face, and are inflicted by blank cartridges. These blank cartridge wounds are deceptive in that they present usually a comparatively clean-cut perforation of the skin, surrounded



by imbedded powder grains. In many instances the patient comes immediately under the supervision of the physician; other patients are seen only after the infection has produced considerable local and systemic disturbance, or after the much-dreaded surgical complication of lockjaw has been established.

It is well-known that a large number of fatal cases of tetanus are observed after the infliction of blank cartridge wounds, and therefore it is of importance that we recall at this season the treatment of blank cartridge wounds as well as the treatment of the serious complication—Fourth-of-July tetanus.

The fact that the nature of these wounds is primarily explosive, and that the damage is for the most part beneath the skin, suggests that enlargement of the cutaneous wound is the first indication in the treatment. As soon as the enlarged skin wound has made the adjacent structures visible, it is found that the injury extends to a distance beyond the cutaneous wound. The explosive character of the wound forces the powder, portions of the blank cartridge and dirt far beyond the wound along the sheaths of tendons and under the fascia, grains of powder, for example, as found near the wrist in the wound entering the finger and hand. The wads are driven into deep tissues, and the fire and powder bruise and lacerate the structure in all directions.

These conditions have been so often found and have been so often described that they should form the basis for the treatment of these wounds, but unfortunately are often

forgotten, and the attending physician allows wads, powder and dirt to remain in the wound. It is not all sufficient to open the wound, remove the wads and irrigate with an antiseptic solution and then pack it for the purposes of drainage. In order to avoid tetanus infection it is necessary that every part of the wound into which the dirt may have been forced be thoroughly cleansed and packed, so that not only the wound secretion may escape, but that the air may enter the wound, for the tetanus bacillus grows where air does not enter. The wounded person should therefore be placed under the influence of an anesthetic, the external wound thoroughly cleansed and then enlarged and the subcutaneous tissues involved should be carefully and systematically dissected.

The wishes of the parents or the objections of the patient should not govern us as to the extent of our operative interference. The much-practiced cauterization of the wound can only be hurtful, for it closes up spaces in which tetanus bacilli may lodge, and thus furnishes them the surroundings for their growth.

Of equal importance with thorough cleansing and drainage is the prophylactic administration of tetanus antitoxin. The numerous unquestionable instances in which it has been employed successfully in other lacerated and contused wounds warrants its systemic use in the Fourth-of-July pistol wounds. Besides, we have learned from our veterinary confreres that in stables and veterinary hospitals in which tetanus has become epidemic, animals to which prophylactic doses of antitoxin were given

did not become infected, and that unprotected animals developed the disease.

To patients under eight years 5 cc. doses should be injected in the neighborhood of the wound, or if the wound is in a fleshy part, into the muscle. For those older, 10 cc. should be given, if the remedy is at hand, immediately; if not, as soon as it can be procured.

#### STATE MEDICAL ASSOCIATION.

It is with pride the association recognized the last annual meeting as the most successful in the history of medical conventions in Missouri. The most successful not only because of the excellent scientific program presented, not only because of the record breaking attendance, but also because of the enthusiasm and good will manifest among the members. The meeting hall was well located, the hotel accommodations good and the hospitality of the Clay County Medical Society all that could be desired. The contrast between the meetings now and before the reorganization is well marked. At last it seems as though the doctors of Missouri have begun to work together in a common cause. Such meetings, because of their scientific and numerical success, are potent factors in the upbuilding of the medical profession.

#### THE PROGRAM.

The program at the last annual meeting was most excellent, though some felt that a larger number of contributions should have been read by members from the country. Next year the gentlemen who are to contribute to the scientific program are

to be appointed by the various county societies in affiliation with the state association. It is to be hoped that the following named gentlemen, all of whom were among the number invited to read papers at Excelsior Springs, but who declined the invitation for various reasons, will be appointed on the program for the Jefferson City meeting: Drs. Jacob Geiger, St. Joseph; C. H. Wallace, St. Joseph; J. D. Brummall, Salisbury; E. H. Miller, Liberty; L. W. Dallas, Hunnewell; Woodson Moss, Columbia; J. J. Norwine, Poplar Bluff; W. S. Allee, Olean; R. D. Haire, Clinton; A. R. Snyder, Joplin; R. L. Johnson, Rolla, and E. W. Schauffler, of Kansas City. Now that the work is to be done in sections it should be possible to have a large number of papers read and discussed. Every society in the state should select at least one member whose paper should be prepared and read before the local society, discussed, possibly rewritten, and then read at the annual meeting. In this way the members may be stimulated to do better work. The number of sections into which the scientific work will be divided has not yet been decided, but will probably be two or three.

#### THE 1905 ROSTER.

Elsewhere in this issue will be found a roster of members of the state medical association. On the 22d of May the list of each county society was sent to the secretary for corrections and additions. The names and addresses as they appear should, therefore, be without error. Additions are constantly being made to

the list. As members pay their dues in the local society they are reinstated in the state association. Thus the

total membership should be increased about 200 during the next three months.

### ROBERT MAURICE KING.

Dr. R. M. King, of St. Louis, died at his home in St. Louis, on May 2, 1905. At the time of his death he was treasurer of the St. Louis Medical

Following the early plan, he read medicine under a preceptor, matriculated at the Jefferson Medical College and there won his Doctorate in 1867.



Society. The following memorial resolutions were adopted by the St. Louis Medical Society at its meeting on May 6, 1905:

*To the Memory of Dr. Robert Maurice King, Adopted by the St. Louis Medical Society, May 6, 1905.*

Robert Maurice King was born in Madisonville, Kentucky, June 1, 1843. His preliminary education was secured at Princeton College (Ky.) and Bethany College (Va.) from which he made his Master of Arts degree.

After practicing for a number of years in his native town, in 1876 he removed to St. Louis and there remained until his death, May 2, 1905.

While resident in Kentucky, Dr. King served as a member of the State Board of Health. In St. Louis he was appointed Professor of Physiology and Clinical Medicine in the College of Physicians and Surgeons. After a service of five years he was appointed Professor of Materia Medica and Therapeutics in the Beaumont



Hospital Medical College. Later he became Professor of Obstetrics in the St. Louis College of Physicians and Surgeons, and held this position a number of years, resigning it but recently. He was Physician to the Protestant Hospital.

Despite the demands made by an active, general practice, by teaching and by official duties in sundry secret orders, Dr. King interested himself in the political field. His terse, pungent remarks were illuminative, and his influence always bulked for political righteousness.

This society has observed, during his long term of membership, a striking spirit of loyalty and of cheerful service, of which the excellent condition of our exchequer is the last vibrant witness.

Notwithstanding having received a medical training during the period unblest by the wonderful adjuvants of the modern curriculum, which so greatly facilitate the ready acquisition of accurate knowledge, yet one might invariably depend upon Dr. King for a keen interest in and a comprehensive grasp of the most modern of diagnostic and therapeutic refinements, the practical usage of which was part and parcel of daily work.

Never sat he in censorious judg-

ment, but with a rather unusual clarity of thought did he combine a flexible many-sidedness of viewpoint, with a keen and cordial appreciation of the craftsmanship of his colleagues. The gentle voice, the soft step, the cordial handgrasp, the smiling greeting, the characteristic urbanity served to accentuate, nay, mellow the years which have so speedily drawn to this untimely close.

In his last insidious illness, with the knowledge of the initiate, burdened with solicitude, and yet with simple courage and composure did he yield himself to the counsel of his associates and their belief in the necessity of a major surgical intervention.

Surely the grace, the courage, the manliness of this gentleman and his passing, shall not rest unrecognized by this society; therefore be it

*Resolved*, That a copy of this memorial be spread on the minutes of this society, and a copy transmitted to the bereaved family of Robert Maurice King.

Respectfully submitted,

ROBERT M. FUNKHOUSER,  
AMAND N. RAVOLD,  
NORVELL W. SHARPE,

*Committee.*

## COUNTY SOCIETY NOTES.

### CASS COUNTY MEDICAL SOCIETY.

Dr. R. D. Ramey, President.  
Dr. J. S. Triplett, Secretary.

The regular meeting of the Cass County Medical Society was held at Harrisonville on June 1st, Dr. Ramey presiding. Dr. W. M. Clemmons read a paper on "Influenza," which was discussed by Drs. Dawson, Overholser, Triplett, Crawford and Ramey. Dr. Overholser presented a paper on "Kidneys and the Urine." Discussion by Drs. Farrow, Triplett and Clemmons. A quiz on "Anatomy and Treatment of Inguinal Hernia" was conducted by Dr. Farrow. Dr. Triplett demonstrated the "Tubercle Bacillus" from a case which he had reported to the society.

In future the meetings of the Cass County Medical Society will be held monthly instead of quarterly, motion to that effect having carried at this meeting. The following new members were elected: Drs. B. E. Dawson, Belton; E. M. Gilham, of Belton; Edw. Schoor, of Garden City.

The next meeting of the society will be held at Harrisonville on July 6th.

J. S. TRIPLETT, Reporter.

### COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.  
Dr. R. S. Holman, Secretary.

The June meeting of the Cooper County Medical Society was held at Chouteau Springs, ten members being present. A number of cases were reported and discussed, after which the members enjoyed an outing. At the

July meeting a paper will be read and the strong points of Dr. McCormack's lecture brought up for discussion.

R. S. HOLMAN, Secretary.

### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.  
Dr. H. Will Elders, Secretary.

Jefferson County Medical Society met in regular session on May 23d, at 10:30 A. M., at De Soto, Dr. Farrar presiding. Dr. Taylor presented an excellent paper on "Carcinoma of the Breast," the discussion on which was opened by Drs. Hamil and Pickel. The meeting then adjourned until 1 P. M. At the afternoon session papers were read on "Mucous Colitis," "Placenta Previa," and other subjects. After the discussion on these papers and the conclusion of other matters, the society adjourned.

This meeting was a very enthusiastic one and was attended by a large number of physicians from all parts of the county. The next meeting will be held at Festus on June 27th, at 7 P. M. H. WILL ELDERS, Reporter.

### ST. CLAIR COUNTY MEDICAL SOCIETY.

Dr. W. Cline, President.  
Dr. E. D. Miles, Secretary.

The St. Clair County Medical Society met in Osceola on June 13th, with the president, Dr. Cline in the chair. The attendance at this meeting was very good. Dr. E. D. Follin, of Collins, read a very interesting paper on "Malaria." The essayist took the view that malaria was always

communicated through the medium of the mosquito, but this theory was not generally accepted by all who participated in the discussion of the paper. Dr. C. P. Bowden, of Appleton City, read a paper on the "Importance To and Advantages to Be Gained by the General Practitioner by Post Mortem Examinations, Especially in Confirming Diagnosis." The doctor stated that opposition to post-mortem examinations was usually a matter of sentiment.

The next meeting of the society will be held on the second Tuesday in September. At this meeting the annual banquet will be tendered the members, it marking the third anniversary of the St. Clair County Medical Society.

E. D. MILES, Secretary.

#### ST. LOUIS MEDICAL SOCIETY.

Dr. F. L. Henderson, President.

Dr. T. A. Hopkins, Secretary.

MAY 27 to JUNE 10, 1905.

The St. Louis Medical Society has convened in regular session three times since May 26th. The following papers, addresses, etc., have been presented before the society:

At the meeting held May 27th the regular scientific program was a "Symposium on Blood Examinations," consisting of "Demonstrations and Methods of Typhoid Blood Examinations in the City Laboratories," by Dr. C. A. Snodgras; "Newer Methods of Blood Examinations for Typhoid, with Demonstrations," by Dr. B. M. Shoemaker; "Examination of the Blood for Malaria," by Dr. G. C. Crandall; "The Value of Blood Examinations for

Leucocytosis," by Dr. M. B. Clopton, and "Trypanosome Infection of the Blood, with Demonstrations," by Dr. C. Fish. Dr. Snodgras uses the microscopic method of examining for typhoid. The "dry blood," "whole blood" or serum methods may be used for microscopic work. The dry blood method, consisting of a drop of blood allowed to dry on a slide, is the one commonly in use in the city laboratories. In making the Widal reaction a 16-hour bouillon typhoid culture is used. The dried blood is dissolved and diluted 1-20, and equal parts of this dilution and the culture are mixed and examined in a hanging drop. Loss of motility is noticed in one and a half to two hours if the Widal reaction be positive. Several specimens of the Widal reaction were presented under the microscope.

Dr. Crandall, acting for Dr. Shoemaker, presented a new test (macroscopic) for typhoid. The test is modeled after Borden, and is as follows. The bouillon typhoid culture is killed by adding one per cent. of formal., and the result is a stock solution or culture which is good for six to nine months. This solution is diluted as in making a Widal reaction, and in the course of a few hours a flocculent white precipitate is formed and settles to the bottom of the test tube. This test is considered reliable, and does not require the use of the microscope. Several specimens were presented.

Dr. Crandall presented several specimens of blood stained for the plasmodium of malaria. He does not believe in quinine as an absolute test for malaria, and a positive diagnosis can only be made by finding the plasmo-



dia in the blood. When they are few in number, a drop of blood is allowed to dry on a slide and then washed with water. The hemoglobin is dissolved and then the specimen is stained by the usual methods. The plasmodia from a large amount of blood are gathered into a small area by this method.

Dr. Clopton presented several leucocyte count charts, and demonstrated that a leucocytosis is usually high early in disease and falls as it progresses. Several counts should be made, and the higher the infection the earlier the large count and the more early it diminishes. Leucocyte counts are not absolute for diagnostic purposes and are to be considered as one in many of the usual factors used in making a diagnosis.

Dr. Fish presented some stained specimens of the trypanosomes. They are two or three times the size of a corpuscle and live in the plasma. Trypanosome infections are peculiar to tropical countries, and affect animal industries in these places. As yet no definite specific treatment is known, although years have been spent in research. Sleeping sickness in man is traceable to trypanosome infection. It is transmitted by insects—mosquitoes, etc.

The symposium was discussed by Drs. Funkhouser, Gradwohl, Ravold, Grimes, Shattinger and Brown.

Drs. Baerens and Tiedeman presented an interesting pathological specimen, consisting of a heart, with rupture of the ventricular septum. A large degenerated gummatous-like area was seen and the patient gave a definite specific history. Death was

sudden. The patient was up and about prior to his demise.

#### MEETING OF JUNE 3D.

At the meeting held June 3d, Dr. John Young Brown presented several "Specimens Illustrating the Importance of certain points in the Diagnosis and Surgical Treatment of Appendicitis," and Dr. Joseph Grindon presented a paper on "A case of Indigenous Tubercular Leprosy, with Remarks on Leprosy in the United States."

Dr. Brown made the point of a thorough and clear diagnosis of appendicitis being established and then operated as soon as possible under the circumstances. The earlier in the disease the operation, the better it is for the patient and for the surgeon. It is not possible to determine the exact extent of pathologic processes before opening the abdomen and the temperature and pulse are not reliable guides in this direction.

Lately Dr. Brown has operated on a series of six cases of so-called surgical general peritonitis, complicating appendicitis, with no deaths. Irrigation is not used and no unnecessary manipulations are made. A glass drainage tube is placed in the pelvis and the patient is placed in the higher Fowler position after operation. Discussion by Drs. Carson, Kiefer, Elbrecht, Moore, Scott, Morris, Deutsch and Meisenbach. Dr. Carson presented a drawing of an interesting pathologic appendix recently removed.

Dr. Grindon reported a case of tubercular leprosy recently under his observation, and stated that he believes "that many more cases really

exist in the United States than are reported." He named the principal leper colonies in the United States, they being mainly in the South and in our island possessions. Numerous plates showing the forms of leprosy were also presented. Discussion by Dr. Scherek.

#### MEETING OF JUNE 10TH.

At the meeting held June 10th Dr. A. H. Meisenbach presented some "Specimens of Pelvic Surgery with Critical Remarks." The first specimen was one of carcinoma of the cervix uteri, the second a specimen of cervix and corpus uteri, cystic ovaries and uterus gravidorum, and the third specimen one of carcinoma of the rectum. Two specimens of the last case were presented, one being the pathologic condition removed at the operation, and the second the condition left by the operation and removed from the cadaver. The patient died several months after the operation, after being up and about, from la grippe pneumonia. Post mortem examination of the liver revealed several secondary carcinomatous nodules and a single stone was found in the gall bladder.

From Dr. Meisenbach's remarks and the discussions, it was made clear that an encouragement for complete recovery from carcinoma of the cervix should not be given, and that a case not presenting return symptoms after five years is seldom met. Operation promises a lease of life and palliation of the severe symptoms of the primary trouble. Removal of the pelvic lymphatics is not often attempted, and cases reported do not tend to show that this procedure is effective,

because of the impossibility of removing all the glands which may be involved. Discussions by Drs. Gellhorn, Kiefer, Funkhouser, Brown, Sharpe, Stauffer and Moore.

The following new members have been elected: Drs. Newton M. Freund, E. W. Eberlein, Lewis M. Warfield, C. A. Vosberg and Victor B. Kiefer.  
C. H. SHUTT, Reporter.

#### JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robt. T. Sloan, President.  
Dr. Max Goldman, Secretary.

The Jackson County Medical Society held its regular meeting May 25, 1905. the vice-president, Dr. E. H. Thrailkill, in the chair.

The scientific program consisted of a paper by Dr. Hal Foster on the "Use of Paraffin in the Correction of Deformities of the Nose," and the report by Dr. Jabez N. Jackson of a case of carcinoma of the descending colon, for which he had performed a resection, followed by an end-to-end anastomosis, and of a series of cases in gall bladder surgery presenting clinical features of considerable interest.

Dr. Foster's paper included some statistics relating to operations for the correction of nasal deformities, demonstrating chiefly wherein the dangers attending this work are to be found and by what means the essentials for successful results are to be obtained. He described minutely his method of operating, and stated that in cases of failure faulty technique is the agent largely responsible.

The discussion of this paper was opened by Dr. J. W. Gaines, Drs. Jos.

Lichtenberg and J. E. Sawtell also taking part.

The case of carcinoma of the descending colon, reported by Dr. Jackson, was of interest because of the age of the patient, a nurse, female, at thirty-four, and especially from the point of view of diagnosis, the symptoms presented having been very vague and the physical signs few in number, the mass being difficult to palpate and quite movable owing to the long mesentery.

The cases in gall bladder surgery which Dr. Jackson reported were valuable because of the opportunity afforded to study various clinical pictures furnished by the histories of the cases at hand. Some of the patients complained chiefly of pain and distress in the epigastrium, some in the region of the gall bladder, radiating to the back and under the scapulæ, while others had only slight pain; some exhibited evidences of severe gastric disturbances, while others attributed to "biliousness" the chief cause of their suffering. It was also interesting to observe the ages of the patients in the series; one was twenty-six years, another fifty-one, another twenty-four, another fifty-five and the last one forty. The chief purpose of reporting these cases, as explained by Dr. Jackson, was to call to mind the fact that in many cases of so-called gastro-intestinal derangement and "bilious" attacks, when the question of a positive diagnosis arises, one must be constantly on his guard, and great care should be exercised lest one overlook the presence of gall stones or of inflammation of the biliary passages induced thereby.

This report was well discussed. Dr.

A. E. Hertzler, in opening the discussion, said, in reference to the case of carcinoma reported, that it is often difficult to differentiate between a growth so located and a dislocated kidney. Dr. H. C. Crowell spoke of the elimination of the "age limit" in the diagnosis of carcinoma of the descending colon. Others taking part in the discussion were Drs. A. H. Cordier, J. M. Frankenberger, C. F. Roberts, J. M. Langsdale and W. H. Coffey. Dr. Jackson closed the discussion.

Dr. Jackson then exhibited to the members of the society a huge ovarian cyst which he had removed a few days previously.

MAX GOLDMAN, M. D., Secretary.

### JOHNSON COUNTY MEDICAL SOCIETY.

D. M. P. Shy, President.

Dr. E. H. Gilbert, Secretary.

Johnson County Medical Society met in regular session at the court house in Warrensburg on June 10th at 3:00 P. M. After disposing of routine business and electing three new members the society adjourned to meet at Pertle Springs Hotel at 8 o'clock, as this was the date for the annual banquet. At Pertle Springs the reception committee had prepared a splendid banquet for the members and guests of the society. The guests were Dr. Whelpley and wife, of St. Louis; Dr. McGinnis and wife, of Hoffman; Dr. Adcock and wife, of Warrensburg. Following are the subjects of the toasts: "The Physician's Importance," Dr. W. H. Aben; "The Strenuous Life of a Physician," Dr. John T. Anderson; "Social Standing of the Physician," Dr. Z. Case; "The Dreams of the Recent Gradu-



ate," Dr. W. G. Thompson; "Sugar Coated Ideas of the Old Doctor," Dr. G. L. Callaway; "The Coming Physician," Dr. T. L. Bradley; "The Ladies," Dr. L. J. Schofield; "The Doctor's wife," Mrs. Z. Case; "The Ideal Physician," Dr. E. H. Gilbert; "The Physician in Politics," Dr. J. J. Anderson; "The Natural Born Physician," Dr. C. O. Ozias; "The Grandure of the Physician's Life," Dr. O. D. Hall. Dr. Whelpley responded to a toast of his own suggestion, "Medical Society Indians, or How I Lost My Hair."

E. H. GILBERT, Reporter.

#### KNOX COUNTY MEDICAL SOCIETY.

Dr. S. M. Brown, President.

Dr. H. J. Jurgens, Secretary.

The regular meeting of the Knox County Medical Society was held at Edina June 3d. Dr. J. R. Mitchell read a paper on "Bowel Troubles of Children," which was discussed by Drs. L. S. Brown, H. J. Jurgens, Geo. Brown, and the discussion closed by Dr. Mitchell.

Resolutions of respect were adopted in memory of Dr. John H. Campbell, deceased.

On motion it was decided to hold meetings every other month instead of every month. At the next regular meeting a symposium on typhoid fever will be presented, with the following members participating: Dr. J. R. Mitchell, "Symptomatology;" Dr. Arnett, "Etiology;" Dr. Luman, "Contagion and Infection;" Dr. Jurgens, "Pathology;" Dr. Geo. Brown, "Treatment."

H. JURGENS, Secretary.

#### HOWELL COUNTY MEDICAL SOCIETY.

Dr. J. W. Bingham, President.

Dr. H. C. Shuttee, Secretary.

At the regular meeting of the Howell County Medical Society on June 1st, there was a good attendance of the members. Dr. J. W. Bingham read a paper on "Acute Rheumatism in Children," and Dr. H. C. Shuttee read a paper entitled "Adenoid Growths of the Nasopharynx." Both of these papers were generally discussed by those present.

The next meeting of the society will be held August 3d, and as this is the annual meeting business matters of great importance to the profession of the entire county will come up for attention. A full attendance of the members is earnestly requested.

H. C. SHUTTEE, Reporter.

#### ANDREW COUNTY MEDICAL SOCIETY.

D. B. Bryant, President

C. O. Jeffries, Secretary.

The regular meeting was held in Savannah, on June 7th, Dr. D. B. Bryant presiding. This was the first meeting held by this society since its organization on April 12th, at which time twenty physicians, out of a total of twenty-eight practitioners in the county, were present.

After reading the minutes of the preceding meeting the society was agreeably entertained by a paper on "Tumors," read by Dr. Jacob Geiger, of St. Joseph. Several interesting reports were made on cases of detached placenta followed by hemorrhage before full term, and several cases of placenta previa were reported.

Dr. Geiger also reported an interesting case of ether pneumonia following an operation for hernia. All the members participated in the discussion of the paper by Dr. Geiger, and in the cases reported.

### DUNKLIN COUNTY MEDICAL SOCIETY.

Dr. N. F. Melley, President.  
Dr. G. L. Johnson, Secretary.

Dunklin County Medical Society has had four papers read at the last two meetings and at one meeting a lecture on "Gall Stones." The society is in a flourishing condition, with twenty-two members, and applications coming in at almost every meeting. It is only a question of time until every eligible physician in the county will be a member of the society.

G. L. JOHNSON, Secretary.

### FRANKLIN COUNTY MEDICAL SOCIETY.

Dr. H. A. Booth, President.  
Dr. A. C. Brown, Secretary.

The regular meeting of Franklin County Medical Society was held at Pacific, on June 6th. Dr. I. M. Owens, of Beaufort, read an interesting paper on "Senile Gangrene," and reported a case. Dr. Charles F. Bright presented a paper entitled "Some Suggestive Helps to the General Practitioner," and Dr. Kitchell, of St. Clair, entertained the members with a collection of "Humorous Quotations and Pointers From the Busy Doctor." The meeting was full of interest and all joined in the discussion of the papers.

It was decided to hold regular meetings quarterly at Pacific and one spe-

cial meeting at Union, on the last Tuesday in July.

A. C. BROWN, Reporter.

### NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. W. Lamson, President.  
Dr. Horace Bowers, Secretary.

Newton County Medical Society met in regular session on June 13th at Neosha, fourteen members being present. Dr. R. C. Lamson read a paper on "Trifacial Neuralgia;" Dr. R. L. Willis read a paper on "Dysentery," and Dr. A. W. Benton presented a paper on "Non-operative Treatment of the Female Pelvic Organs." These papers were all of great interest to the members and were followed by a full discussion.

The Newton County Society is in a flourishing condition and great interest is manifested by all members.

HORACE BOWERS, Secretary.

### GREENE COUNTY MEDICAL SOCIETY.

Dr. W. P. Patterson, President.  
Dr. Robt. M. Cowan, Secretary.

Greene County Medical Society met in regular session in council chamber of city hall, at Springfield. Minutes of previous meeting read and approved. Members present: Drs. Patterson, Woody, Fulton, Farnsworth, Smith, Cox, Terry, Coffelt and Cowan.

On motion the committee on by-laws and affiliation was discharged.

Dr. Farnsworth, the treasurer, read his semi-annual report for 1905.

A motion was made and seconded that a warrant be drawn on treasurer for \$2, the dues of Dr. Sherman, the same to be forwarded to the secretary

of the State Medical Society. On motion the society proceeded to elect three members of the board of censors. Dr. Smith was elected for three years, Dr. Cox for two years, Dr. Farnsworth for one year.

The president announced that the other committees which are appointive would be announced later.

A general informal discussion relating to the society's future work consumed the remainder of the time.

As is the custom the society adjourned for the summer months. The next meeting being the first Saturday night in September.

ROBT. M. COWAN, Secretary.

#### PLATTE COUNTY MEDICAL SOCIETY.

Dr. R. P. Davis, President.

Dr. G. C. Coffey, Secretary.

Platte County Medical Society met at Camden Point, June 7th. The program for the meeting had been placed in the hands of the wives of the members, and the first part of the evening was devoted to a social entertainment provided by the ladies. Miss Margaret Herndon recited, and Miss Margaret Redman entertained with a song. Mrs. A. S. Herndon read a paper entitled "If I Were a Doctor," which was greatly enjoyed by all present.

Dr. E. McD. Coffey gave a short and interesting talk on the "Pioneer Days in Medicine in Platte County." Dr. Sampson and Dr. W. H. Coffey, of Kansas City, were present and entertained the members with short talks. Dr. Redman made his report as a delegate to the State Association, after which the society adjourned to meet in the office of Dr. Herndon,

where the scientific program was taken up.

Dr. Sampson presented a case of pseudo-membranous colitis. The subject was liberally discussed by the members present. Dr. Davis gave a microscopical demonstration of specimens from this case, which proved to be undigested banana fibers.

It is the intention of the society to make these outings annual events to be celebrated at different places in the county once a year. The next meeting will be held at Platte City, July 5th.

G. C. COFFEY, Reporter.

#### PULASKI COUNTY MEDICAL SOCIETY.

Dr. W. L. Reagan, President.

Dr. G. W. Orrick, Secretary.

On May 11th the physicians of Pulaski county met at Richland and organized a county society. Nine physicians were present—Drs. R. F. Harrison, W. C. Carter, M. T. Rowlin, W. L. Reagan, Ernest A. Oliver, H. C. Murphy, Geo. W. Thume, G. W. Orrick and N. J. Stebbins. Dr. Reagan was elected president; Dr. Harrison, vice-president; Dr. Orrick, secretary and treasurer. A committee was appointed to draft a constitution and by-laws in harmony with the constitution and by-laws of the State Medical Association. Drs. Tice, Rowlin and Murphy were appointed censors. Dr. Harrison was elected delegate to the State Association.

At the next meeting Dr. Oliver will read a paper on appendicitis, and Dr. Carter a paper on typhoid fever. The society meets quarterly, the next meeting occurring the first Monday in August.



## ST. LOUIS COUNTY MEDICAL SOCIETY.

Dr. H. G. Wyer, President.  
Dr. H. T. Randle, Secretary.

The St. Louis County Medical Society held its last regular meeting on May 10, 1905. The meeting was called to order by the president at 8 P. M. Minutes of the last meeting were read and approved. The reports of committees were held over, as they were not in readiness to report. The name of Wm. H. Townsend, of Maplewood, was presented for membership by Dr. Guibor, and referred to the committee.

Dr. Guibor, of Maplewood, read a very excellent paper on "Cerebro-Spinal Meningitis." Discussion by the society. A vote of thanks was tendered Dr. Guibor.

Dr. H. G. Wyer, of Kirkwood, also read a very interesting and practical paper on the "Care and Feeding of Infants." Discussion led by Dr. Moore.

The meeting adjourned at 10 P. M. to meet again in June.

DR. H. T. RANDLE, Secretary.

## MILLER COUNTY MEDICAL SOCIETY.

Dr. S. P. Hickman, President.  
Dr. G. D. Walker, Secretary.

The regular meeting of the Miller County Medical Society was held at Olean on June 1st. Dr. J. L. Gilleland presented a case of endocarditis following rheumatism, the patient being a child of eight years old. The discussion of diagnosis and treatment of endocarditis was participated in by all the members present. Dr. H. H. Brockman read a paper on "Anes-

thesia," in which he discussed the various anesthetics, both local and general, and the methods of administering same. Dr. J. W. Temple opened a discussion upon the subject of "Catarrhal Pneumonia," in which all the members joined. On motion Dr. A. J. Nixdorf was elected an honorary member for life. A vote of thanks was tendered the resident physicians of Olean, Drs. Allee and Gilleland, for the splendid entertainment furnished the visiting members. The society adjourned to meet the first Thursday in September at Ulman.

G. D. WALKER, Reporter.

## PETTIS COUNTY MEDICAL SOCIETY.

Dr. W. C. Overstreet, President.  
Dr. W. J. Ferguson, Secretary.

At the meeting of the Pettis County Medical Society, held May 15, 1905, Dr. Martin presented a paper on "Infantile Convulsions," which was well received and brought out quite an interesting discussion by all present. Dr. Dunlap said it was a condition which gave a great deal of alarm to the parents and attendants and the physician should be very careful lest he be carried off his feet in the excitement and bear in mind that it is generally something which soon exhausts itself. He considered chloroform very unsatisfactory. If the stomach is overloaded he administers an emetic and often supplements this with an enema. He had never seen convulsions followed by epilepsy except possibly one case and in that case the family was extremely nervous and other members were afflicted with epilepsy. Phenacetine and acetanilide he had found very effective.

Dr. Wood had seen a good many cases and only one that proved fatal; that was due to uremia. He had seen some cases which seemed epileptoid in character, but usually they were caused by some stomach trouble. Dr. Fisher favored cold applications to the head and warmth to the body; he usually administers a calomel purge, followed by salol. Dr. Cowan advised the correction of an overloaded stomach and free movement of the bowels. The prognosis should always be guarded as there is usually a second attack. It was wise to always suspect epilepsy. Dr. Bohling thought the vast majority of cases were caused by gastro-intestinal trouble of some kind which should be corrected. He usually gave bromide of potash in recurrent attacks. Dr. Cartwright said his experience had been that these convulsions always occurred with a high fever as in pneumonia, scarlet

fever and following tubercular meningitis and that treatment was very unsatisfactory. Dr. Cole said the proper way to use chloroform was to give it to complete narcosis, and advised morphine when there were more than three spasms. He believed most of the cases were due to ptomaine poisoning. Dr. Ferguson was greatly interested in the paper. He believed the usual cause from some trouble in the gastro-intestinal tract and advised emptying both the stomach and bowels. He had seen one case of epilepsy following convulsions in infancy.

Dr. Cartwright presented a case in which he and Dr. Ferguson had resected the upper third of the left humerus, about one and a half years ago for caries. The result seemed good and bones were reforming, but two or three small sinuses remained which called for a second operation.

W. J. FERGUSON, Secretary.

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## NEWS ITEMS.

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### THE MEDICAL SOCIETY OF THE MISSOURI VALLEY.

ANNUAL MEETING AT COUNCIL BLUFFS,  
AUGUST 24-25, 1905.

The eighteenth annual meeting of this organization will occur on Thursday and Friday, August 24th and 25th, in the city of Council Bluffs, under the presidency of Dr. S. Grover Burnett, of Kansas City. The local arrangements are in the hands of Dr. V. L. Treynor and an able corps of assistants, which assures an enjoyable time. Two symposiums, one on "Pulmonary Tuberculosis" and the other on "Diabetes," will be presented. Those who wish to contribute papers on these or any other

subjects should communicate with the secretary at once, as the program will be limited, and papers will be placed in the order in which the titles are received.

CHAS. WOOD FASSETT,  
Secretary.

### SURGICAL AND OBSTETRICAL INSTRUMENTS FOR SALE.

The surgical and obstetrical instruments of the late Dr. A. Derivaux, consisting of the most recent models, are for sale at reasonable prices. Mrs. Derivaux will furnish list of instruments and prices to applicants. Address 2723 Russell avenue, St. Louis, Mo.

HOSPITAL INTERNE (MALE).  
EXAMINATION FOR PANAMA CANAL,  
JULY 12-13, 1905.

The United States Civil Service Commission announces an examination on July 12-13, 1905, at the places mentioned below, to secure eligibles from which to make certification to fill vacancies in the position of hospital interne under the Isthmian Canal Commission on the Isthmus of Panama. Two days will be required for this examination. Men only will be admitted to this examination. Each applicant for the Isthmian Canal service will be required to submit to the examiner, on the day he is examined, a photograph of himself, taken within three years, which will be filed with his examination papers as a means of identification in case he receives appointment. An unmounted photograph is preferred. The date, place and kind of examination, the examination number, the competitor's name and the year in which the photograph was taken should be indicated on the photograph. Age limit, 20 to 30 years on the date of the examination; salary, \$50 per month, with board and quarters, provided that if appointees are retained in the position of interne after one year they will be paid \$125 per month. Only graduates of reputable medical schools having a three years' course will be admitted to this examination.

The examination will consist of the subjects mentioned below, with the relative weights indicated:

Subjects.	Weights.
1. Letter-writing (the subject-matter on a topic relative to the practice of medicine).....	5
2. Anatomy and physiology (general questions on anatomy and physiology, and histologic or minute anatomy).....	15
3. Chemistry, materia medica and therapeutics (elementary questions in inorganic and organic chemistry; the physiological action and therapeutic uses and doses of drugs).....	10
4. Surgery and surgical pathology (general surgery, surgical diagnosis; the pathology of surgical diseases).....	20
5. General pathology and practice (the symptomatology, etiology, diagnosis, pathology and treatment of disease).....	25
6. Bacteriology and hygiene (bacteriologic methods, especially those relating to diagnosis; the application of hygienic methods and prophylaxis and treatment ...	10
7. Obstetrics and gynecology (the general practice of obstetrics; diseases of women, their pathology, diagnosis, symptoms and treatment, medical and surgical).....	15
Total .....	100

Applicants should at once apply, either to the United States Civil Service Commission, Washington, D. C., or to the secretary of the board of examiners at any place mentioned in the accompanying list, for application Form 1312. The medical certificate in Form 1312 must be filled in by a reputable practicing physician. No application will be accepted unless properly executed and filed with the Commission at Washington. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

The examination may be taken on the date mentioned at any of the following places: Jefferson City, Kansas City, Kirksville, Springfield, St. Louis.



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# Missouri State Medical Association

ORGANIZED 1857

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 Baker, W. L., Salisbury.  
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 Wetzel, N. M., Jameson.  
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 Beall, H. E., Campbell.  
 Birchett, J. C., Cardwell.  
 Back, Eli, Cardwell.  
 Bond, V. H., Cotton Plant.  
 Brown, J. L., Campbell.  
 Cone, M. L., Campbell.  
 Chaney, Jason, Senath.  
 Caldwell, J. F., Kennett.  
 Egbert, T. H., Kennett.

Finney, W. B., Kennett.  
 Hughes, W. G., Campbell.  
 Hammersly, G. O., Campbell.  
 Johnson, G. L., Kennett.  
 Kelly, N. F., Kennett.  
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 Kitchell, W. E., St. Clair.  
 Mattox, W. P., Sullivan.  
 May, H. A., Washington.

McNay, A. L., Pacific.  
 North, W. R., Labadie.  
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 Rusk, Jno. A., Grays Summit.

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 Ferrell, W. R., Bland.

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Clements, C. C., Springfield.  
 Coffelt, T. A., Springfield.  
 Cowan, R. M., Springfield.  
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 Fulbright, Jno. H., Springfield.  
 Fulbright, J. Harve, Springfield.  
 Fulton, C. E., Springfield.  
 Hill, H. S., Springfield.  
 Hunter, R. B., Springfield.  
 James, W. C., Springfield.  
 Matthews, J. C., Springfield.  
 Nixon, J. H., Springfield.  
 Ormsbee, J. L., Springfield.  
 Patterson, W. P., Springfield.

Peak, O. L., Springfield.  
 Purselley, W. L., Springfield.  
 Ralston, J. P., Springfield.  
 Ross, F. E., Springfield.  
 Sherman, D. U., Elwood.  
 Smith, W. M., Springfield.  
 Tefft, J. E., Springfield.  
 Terry, N. F., Springfield.  
 Williams, J. W., Springfield.  
 Woody, C. E., Springfield.

## GRUNDY COUNTY.

JNO. A. ASHER, President.

W. D. FULKERSON, Secretary.

### MEMBERS.

Asher, J. A., Trenton.  
 Allen, E., Hickory.  
 Addington, W. H., Spickards.  
 Coon, D. W., Trenton.  
 Fulkerson, W. D., Trenton.  
 Moore, G. A., Dunlap.

Sheldon, Samuel, Trenton.  
 Sutton, Noah E., Trenton.  
 Sutton, Bertha E., Trenton.  
 Webster, C. L., Trenton.  
 Wright, J. B., Trenton.  
 Winningham, W. H., Edinburg.

## HENRY COUNTY.

WM. M. SHANKLAND, President.

F. M. DOUGLASS, Secretary.

### MEMBERS.

Benway, Wm. H., Deepwater.  
 Barr, Bernice B., Clinton.  
 Beatty, Joseph G., Clinton, R.F.D. No. 2.  
 Britts, John H., Clinton.  
 Douglass, F. M., Clinton.  
 Fewell, R. B., Montrose.  
 Gibbins, Wm. H., Montrose.  
 Griffith, Charles E., Windsor.  
 Haire, Robt. D., Clinton.

Hampton, Joseph R., Clinton, R.F.D. No. 1.  
 Head, Charles W., Windsor.  
 Menees, G. W., Clinton.  
 Miller, J. M., Montrose.  
 Poaque, Samuel A., Clinton.  
 Shankland, Wm. M., Clinton.  
 Wallis, J. R., Montrose.  
 Woltzen, S. W., Urich.

## HOLT COUNTY.

B. T. QUIGLEY, President.

J. F. CHANDLER, Secretary.

### MEMBERS.

Aiken, S. W., Oregon.  
 Bullock, F. E., Forest City.  
 Bickel, J. T., Mound City.  
 Chandler, J. F., Forest City.  
 Davis, T. O., Maitland.  
 Davis, J. M., Craig.  
 Evans, C. L., Oregon.  
 Gray, M. S., Craig.

Kelley, P. D., Corning.  
 Kaltenbach, E., Craig.  
 Miller, J. W., Mound City.  
 Miller, E. M., Mound City.  
 Minton, J. R., Fortesque.  
 Quigley, B. T., Mound City.  
 Tracy, J. M., Mound City.  
 Williams, Ira, Maitland.

## HOWARD COUNTY.

A. W. MOORE, President.

C. W. WATTS, Secretary.

### MEMBERS.

Bonham, V., New Franklin.  
 Burkholder, O. F., Higbee.  
 Champion, J. R., Hildale.  
 Cordry, H. V., New Franklin.  
 Dinwiddie, T. H., Higbee.  
 Fleet, J. B., New Franklin.  
 Haller, E. C., Harrisburg.  
 Hume, J. Y., Armstrong.

Lewis, C. O., Fayette.  
 Lee, C. H., Fayette.  
 Smith, N. E., Boonsboro.  
 Thompson, W. S., Armstrong.  
 Watts, C. W., Fayette.  
 White, J. A., New Franklin.  
 Wood, J. F., Harrisburg.  
 Wright, U. S., Fayette.

## HOWELL COUNTY.

J. W. BINGHAM, President.

H. C. SHUTTEE, Secretary.

## MEMBERS.

Bingham, J. W., Pottersville.  
 Culp, J. C., Koshkonong.  
 Davis, J. C. B., Mountain View.  
 Dixon, J. C. B., West Plains.  
 Johnson, J. McBride, West Plains.  
 Mitchell, E. H., Pottersville.  
 Nichols, D. J., West Plains.

Reiley, J. F., West Plains.  
 Rowe, H. J., Willow Springs.  
 Shuttee, H. C., West Plains.  
 Spears, Robt. S., West Plains.  
 Thompson, A. H., Lanton.  
 Thornburg, A. H., West Plains.

## IRON COUNTY.

R. W. GAY, President.

IRA. A. MARSHALL, Secretary.

## MEMBERS.

Adams, J. Q., Bellevue.  
 Adams, J. Q., Goodland.  
 Clarkson, David, Annapolis.

Gay, R. W., Ironton.  
 Marshall, Ira A., Ironton.

## JACKSON COUNTY (KANSAS CITY).

ROBERT T. SLOAN, President.

MAX GOLDMAN, Secretary.

## MEMBERS.

Abrams, W. E.  
 Adams, Noah.  
 Anderson, H. C.  
 Armour, Wallace A.  
 Ayres, Samuel.  
 Balsley, J. A.  
 Barbee, C. M.  
 Beattie, Thos. J.  
 Beedle, G. A.  
 Beil, J. Wallace.  
 Bellows, G. E.  
 Berry, G. F.  
 Binnie, J. F.  
 Block, J.  
 Bowman, Dora E., 608 E. 30th St.  
 Bowman, J. W.  
 Brainard, B. F.  
 Brown, Ralph J.  
 Bruehl, Julius.  
 Brunig, F. H., 3rd & Metropolitan Ave.  
 Burekhardt, A. E.  
 Burke, C. L.  
 Burnett, S. Grover.  
 Burrill, C. W.  
 Callaghan, Richard.  
 Campbell, Wm. L.  
 Carbaugh, Eugene.  
 Carl, S. T., 350 Ridge Bldg.  
 Castelow, R. E.  
 Cathcart, C. P.  
 Chambers, J. Q., 705 Shukert Bldg.  
 Chambliss, E. L.  
 Child, Scott P.  
 Clements, Jos.  
 Coffey, W. H.  
 Coffin, G. O.  
 Coleman, H. B.  
 Cook, F. L.  
 Cordier, A. H.  
 Cross, R. O.  
 Crowder, W. H., 532 Harlesby Ave.  
 Crowell, H. C.  
 Curry, E. R.  
 Dailey, F. W.  
 Dannaker, C. A.  
 Davis, A. W.  
 Davis, G. W.  
 Dove, O. H.  
 Drake, N. A.

Dunham, S. A.  
 Edmonson, M. M., 2220 Brooklyn Ave.  
 Eldredge, J. S.  
 Eubank, A. E., 3021 Southwest Blvd.  
 Farney, H. Mercedes.  
 Fields, Thomas.  
 Foster, Hal.  
 Frankenberger, J. M.  
 Freyman, A. A.  
 Frick, William.  
 Frick, W. J.  
 Fryer, B. E.  
 Fulton, A. L.  
 Fulton, C. M.  
 Gaines, J. W.  
 Goldman, Max.  
 Greenlee, A. R.  
 Griffith, J. D.  
 Hall, C. Lester.  
 Hall, D. Walton.  
 Hall, Frank J., 7th & Washington Sts.  
 Halley, George, Ridge Bldg.  
 Hamel, Geo. F., Mo. Pac. Hospital.  
 Hanawalt, H. O., 1214 Main St.  
 Hanna, M. A., 710 Penn St.  
 Hardin, C. B., Rialto Bldg.  
 Harrelson, N. O., Rialto Bldg.  
 Harrington, J. L., Shukert Bldg.  
 Harrison, Addison.  
 Hashinger, Geo. H., Rialto Bldg.  
 Hays, H. C., 310 Century Bldg.  
 Hedrick, C. L. V., 1108 Walnut St.  
 Henry, Fannie J., 2203 Brooklyn Ave.  
 Hertzler, A. E., 508 Altman Bldg.  
 Hetherington, E. M., Altman Bldg.  
 Hickerson, J. C.  
 Hill, Howard, Rialto Bldg.  
 Horgan, J. A., 3100 Main St.  
 Hubbard, E. E., Rialto Bldg.  
 Hyde, B. C., 404 Bryant Bldg.  
 Iuen, F. J., 1330 Grand Ave.  
 Jacobs, Ben, Altman Bldg.  
 Jackson, C. A.  
 Jackson, J. N., Rialto Bldg.  
 Jerowitz, H. D.  
 Johnson, J. H.  
 Jones, O. F.  
 Jones, K. P.  
 James, S. C., Bryant Bldg.

Jenkins, W. H.  
 King, W. E.  
 Kepner, Jno. W.  
 Kimberlin, Jos. W.  
 Knoche, J. P., Ridge Bldg.  
 Kuhn, Wm. F., Deardorff Bldg.  
 Kyger, J. W., 815 E. 31st St.  
 Lahmer, Ira B., 1336 Broadway.  
 Lane, H. H.  
 Langsdale, J. M., Altman Bldg.  
 Laning, J. H., 1221 Washington St.  
 Lee, R. H.  
 Lyle, Halsey M.  
 Loyd, O. H., Oak Grove.  
 Lauranzana, Louis, 5th & Cherry Sts.  
 Leonard, H. O., 1214 Main St.  
 Leonard, W. H., 601 Southwest Blvd.  
 Lester, Chas. H., Bryant Bldg.  
 Lewis, J. K., 12th & Troost Ave.  
 Lewis, Nannie P., 1219 Wyandotte St.  
 Lichtenberg, Jos., 1209 Wyandotte St.  
 Logan, James E., 1229 Wyandotte St.  
 Look, H. H.  
 Luscher, Louis W., 12th & Grand Ave.  
 McCall, H. B., 12th & Main Sts.  
 McCandless, O. H.  
 McCrea, Maggie, Rialto Bldg.  
 McDonald, Chet., Rialto Bldg.  
 McDonald, Park L., 527 Rialto Bldg.  
 McKee, Jos. W., Rialto Bldg.  
 McQuade, H. D.  
 McVey, Newton, Rialto Bldg.  
 Manahan, J. H.  
 Mann, A. W.  
 Mark, E. G., 1208 Wyandotte St.  
 Martin, H. L., 601 E. 12th St.  
 Martin, J. C.  
 Merriman, C. S.  
 Middleton, James, 412 N. Montgall Ave.  
 Miller, Abram., Rialto Bldg.  
 Miller, Hugh, Shukert Bldg.  
 Mitchell, G. B., Rialto Bldg.  
 Mitchell, John T., Rialto Bldg.  
 Montgomery, W. E., Rialto Bldg.  
 Morris, W. C., 12th & Oak Sts.  
 Morrow, C. J., Bryant Bldg.  
 Morrow, W. F., Altman Bldg.  
 Mosher, Geo. C., Bryant Bldg.  
 Mott, Jno. S., Rialto Bldg.  
 Murphy, Franklin E., Deardorff Bldg.  
 Neff, F. C., Altman Bldg.  
 Newhouse, Stanley, Rialto Bldg.  
 Norberg, Geo. P.  
 Owens, M. J.  
 O'Connor, C., 815 McGee St.  
 O'Donnell, Alfred, 327 Altman Bldg.  
 Parker, O. H., Rialto Bldg.  
 Pearse, Herman E., Rialto Bldg.  
 Perkins, John W., Altman Bldg.  
 Pettijohn, N. J., Shukert Bldg.  
 Porter, Allen, Rialto Bldg.  
 Porter, D. R., 10th & Washington Sts.  
 Punton, John, Altman Bldg.  
 Pickerill, C. W.  
 Pinckard, C. G.  
 Rathbone, F. W., Rialto Bldg.  
 Reed, W. M., Rialto Bldg.  
 Reyling, F. T., Altman Bldg.  
 Richardson, Katherine B., Ridge Bldg.  
 Ridge, I. M., Ridge Bldg.  
 Riegler, D. H., Altman Bldg.  
 Ritter, C. A., Altman Bldg.  
 Roberts, Clarence F., 720 Shukert Bldg.  
 Roberts, C. S.  
 Robertson, J. A., 705 Shukert Bldg.  
 Robinson, Ernest F., Bryant Bldg.  
 Robinson, J. L., Altman Bldg.  
 Rogers, J. C., Rialto Bldg.  
 Rosenwald, Leon, Rialto Bldg.  
 Sams, W. M., 806 Independence Ave.  
 Sanders, Frank L.  
 Sanders, St. Elmo, Rialto Bldg.  
 Sandzen, Carl, Rialto Bldg.  
 Sawyer, J. F., 5th & Lydia Ave.  
 Schaffner, E. W., Deardorff Bldg.  
 Schaffner, Robt. McE., Deardorff Bldg.  
 Schutz, W. H., Bryant Bldg.  
 Strother, J. S.  
 Scott, J. N., Ridge Bldg.  
 Sexton, M. P., Century Bldg.  
 Sherer, Jos. W., 1208 Wyandotte St.  
 Singleton, J. M., 15th & Troost Ave.  
 Sloan, Robt. T., Rialto Bldg.  
 Smith, Avis E., University Bldg.  
 Smith, Robt. M., 203 E. 12th St.  
 Spaulding, C. L., Altman Bldg.  
 Stephens, Nannie A., 813 E. 31st St.  
 Stewart, E. L., 521 Shukert Bldg.  
 Streett, St. Clair, 123 W. 12th St.  
 Sheley, O. C., Independence.  
 Stevens, W. W., Greenwood.  
 Talbot, Ambrose, Rialto Bldg.  
 Taylor, L. G., 720 Woodland Ave.  
 Tesson, N. A. G., 12th & Cleveland Ave.  
 Thomas, A. W., Shukert Bldg.  
 Thompson, G. B., 16th & Genessee Sts.  
 Thompson, James, Rialto Bldg.  
 Thompson, J. H., Deardorff Bldg.  
 Thornton, T. R., 15th & Lydia Ave.  
 Thraillkill, E. H., Rialto Bldg.  
 Tiffany, F. B., 811 McGee St.  
 Trimble, W. K., 2317 Main St.  
 Trueman, H. G., 702 Commerce Bldg.  
 Tryman, G. T.  
 Tyree, W. C., Rialto Bldg.  
 Van Eman, F. T., Altman Bldg.  
 Van Quast, Ernst, Century Bldg.  
 Waddell, Susan C., 3027 Montgall Ave.  
 Wall, A. H., 3839 Independence Ave.  
 Watson, B. F., Rialto Bldg.  
 Wedding, E. V., 15th & Brooklyn Ave.  
 Weiss, F. H.  
 Welch, A. J., 29th & Southwest Blvd.  
 West, W. C.  
 Wever, J. S.  
 Wheeler, B. H., 3919 Main St.  
 Wheeler, W. S., 12th & Grand Ave.  
 Willitts, W. C., Rialto Bldg.  
 Wilson, A. M., 906 Main St.  
 Wilson, Dora G., 9th & Locust Sts.  
 Wilson, John, 720 Shukert Bldg.  
 Wolf, I. J., Rialto Bldg.  
 Wood, N. P.  
 Young, Oscar O.  
 Zwart, B. H., 12th & Main Sts.

## JASPER COUNTY.

A. B. FREEMAN, President.

J. T. STAMEY, Secretary.

### MEMBERS.

Balsley, T. M., Joplin.  
 Cummings, C. C., Joplin.  
 Chenoweth, L. C., Webb City.  
 Clark, J. W., Carterville.  
 Freeman, A. B., Joplin.  
 Grantham, S. A., Joplin.  
 Gray, J. M., Chitwood.  
 James, R. M., Joplin.

Kay, Z. L., Joplin.  
 Kelso, R. S., Joplin.  
 Kinchelow, M. B., Joplin.  
 Lewis, W. E., Chitwood.  
 Lanyon, W. H., Joplin.  
 Matthews, L. I., Joplin.  
 Miller, S. H., Joplin.  
 Miller, Geo. W., Joplin.



Neff, R. L., Joplin.  
Nunn, G. G., Joplin.  
Pifer, J. D., Joplin.  
Rogers, W. H., Asbury.  
Snyder, R. A., Joplin.

Shelton, C. M., Joplin.  
Stamey, J. T., Joplin.  
Spriggs, M. S., Joplin.  
Watkins, C. H., Joplin.

## JEFFERSON COUNTY.

W. H. FARRAR, President.

H. W. ELDERS, Secretary.

### MEMBERS.

Auerswald, G. A., De Soto.  
Bryan, C. G., De Soto.  
Donnell, R. E., De Soto.  
Donnell, J. F., Festus.  
Elders, H. Will, De Soto.  
Elders, G. W. N., Hematite.  
Elders, Geo. W., Ware.  
Farrar, W. H., De Soto.  
Gibson, W. E., De Soto.  
Hensley, O. E., Pevely.  
Harris, C. G., Festus.

Hamel, A. H., DeSoto.  
Hull, W. W., Sulphur Springs.  
Jones, J. E., Hillsboro.  
Long, F. S., De Soto.  
McNutt, I. N., Pevely.  
Mockbee, G. M., Hillsboro.  
Neff, J. B., De Soto.  
Pickel, J. W., Crystal City.  
Prentiss, H. S., De Soto.  
Stegman, J. E., Frumet.  
Tidwell, Geo. W., De Soto.

## JOHNSON COUNTY.

M. P. SHY, President.

E. H. GILBERT, Secretary.

### MEMBERS.

Aber, W. H., Montserrat.  
Adcock, J. A. B., Warrensburg.  
Anderson, J. T., Cornelia.  
Anderson, J. L., Warrensburg.  
Bozarth, John A., Centerville.  
Berry, A. J., Warrensburg.  
Bradley, T. L., Warrensburg.  
Case, Z., Warrensburg.  
Gilbert, E. H., Warrensburg.  
Hall, O. B., Warrensburg.  
Johnson, W. E., Warrensburg.

Murray, L. F., Warrensburg.  
Ozias, C. O., Warrensburg.  
Park, Henry, Dunksburg.  
Porter, W. E., Knobnoster.  
Rice, J. M., Columbus.  
Schofield, L. J., Warrensburg.  
Schoolley, R. C., Robins.  
Shy, M. P., Knobnoster.  
Thompson, W. G., Holden.  
Tilton, A. L., Truxton, Ariz.

## KNOX COUNTY.

L. S. BROWN, President.

HENRY J. JURGENS, Secretary.

### MEMBERS.

Arnett, Andrew, Novelty.  
Brown, Geo. S., Edina.  
Brown, L. S., Edina.  
Jurgens, Henry J., Edina.

Luman, E., Baring.  
Myers, James, Greensburg.  
Northcutt, J. R., Knox City.  
St. John, Horace H., Edina.

## LACLEDE COUNTY.

J. M. BILLINGS, President.

J. A. McCOMB, Secretary.

### MEMBERS.

Anderson, J. M., Conway.  
Barker, J. C., Russ.  
Billings, J. M., Lebanon.  
Carleton, C. E., Stoutland.  
Jacobs, J., Conway.  
Lockwood, W. A., Conway.

McComb, J., Lebanon.  
McComb, J. A., Lebanon.  
Perkins, J. M., Lebanon.  
Pinckard, J. A., Lebanon.  
Ritchey, Robt., Dry Glaize.  
Smith, J. M., Orla.

## LAFAYETTE COUNTY.

P. S. FULKERSON, President.

C. T. RYLAND, Secretary.

### MEMBERS.

Braecklein, W. A., Higginsville.  
Blakely, W. A., Higginsville.  
Cope, J. Q., Lexington.  
Carter, R. C., Higginsville.

Fredenall, G. W., Lexington.  
Fulkerson, P. S., Lexington.  
Fulkerson, J. J., Lexington.  
Hitt, R. E. L., Dover.

Harwood, W. G., Dover.  
Mann, J. A., Wellington.  
Mann, F. W., Wellington.  
Perrie, J., Mayview.

Ryland, C. T., Lexington.  
Sneider, J. A., Concordia.  
Webb, W. C., Higginsville.  
Williams, H., Odessa.

## LINCOLN COUNTY.

S. R. McKAY, President.

W. P. SMITH, Secretary.

### MEMBERS.

Avery, C. D., Troy.  
Beatty, J. D., Troy.  
Blackamore, T. A., Olney.  
Duwelins, L. H., Briscoe.  
Hicks, E. A., Old Monroe.  
Mackey, A. C., Ethlyn.

McKay, S. R., Troy.  
Parker, J. H., Moscow Mills.  
Pendleton, L., Troy.  
Smith, W. P., Troy.  
Strickland, J. R., Moscow Mills.  
Taylor, A. M., Elsberry.

## LINN COUNTY.

KATHRYN V. STANDLY, President.

D. F. HOWARD, Secretary.

### MEMBERS.

Burke, J. L., Laclede.  
Burke, F. W., Laclede.  
Buck, U. G., Rothville.  
Cochran, F. B., Brookfield.  
Cantwell, J. L., Bucklin.  
Dryden, U. C., Purdin.  
Eure, J. B., Brookfield.  
Evans, J. S., Brookfield.  
Fore, T. P., Brookfield.  
Haley, Robt., Brookfield.  
Howard, D. F., Brookfield.  
Jenkins, C. E., Brookfield.  
Lane, J. W., Linneus.

Morris, Robt. H., Linneus.  
Mason, J. W., Brookfield.  
Putnam, Ola, Marceline.  
Putnam, B. B., Marceline.  
Pettijohn, A. C., Brookfield.  
Perrin, J. H., Marceline.  
Oven, T. P., Brookfield.  
Standly, Kathryn V., Brookfield.  
Standly, Z. T., Laclede.  
Standly, E. D., Linneus.  
Stratton, C. D., Rothville.  
Thompson, J. M., Meadville.

## LIVINGSTON COUNTY.

DAVID GORDON, President.

JOHN F. CHERRINGTON, Secretary.

### MEMBERS.

Alberty, O. L., Dawn.  
Alexander, G. W., Chula.  
Beeman, S. M., Chillicothe.  
Barney, R., Chillicothe.  
Batdorff, F. P., Farmersville.  
Carver, H. N., Chillicothe.  
Cabell, R. H., Chillicothe.  
Carlyle, L. P., Wheeling.  
Cherrington, J. F., Chillicothe.  
Chaffin, R. E., Avalon.  
Gordon, Geo. A., Chillicothe.  
Gibson, H. C., Mooresville.  
Girdner, W. M., Chillicothe.  
Grace, H. M., Chillicothe.  
Gordon, David, Chillicothe.

Hutchinson, G. W., Chillicothe.  
Houf, W., Farmersville.  
Henderson, W. A., Chillicothe.  
Murray, R. W., Dawn.  
Ogan, E. F., Chula.  
Piatt, K. S., Chillicothe.  
Stevens, B. N., Chillicothe.  
Simpson, A. J., Chillicothe.  
Simpson, W. R., Chillicothe.  
Swope, Wm. A., Wheeling.  
Tracy, L. E., Chillicothe.  
Trimble, J. W., Wheeling.  
Winter, J. H., Utica.  
White, W. L., Springhill.

## MACON COUNTY.

E. S. SMITH, President.

G. B. RUSH, Secretary.

### MEMBERS.

Allen, F. W., Callao.  
Bradley, W. E., Ethel.  
Brewington, G. F., Bevier.  
Burton, S. L., College Mound.  
Campbell, J. F., La Plata.  
Drew, F. W., Ethel.  
Hunt, J. R., Ardmore.  
Milam, B. J., Macon.  
Miller, A. E., Macon.  
Miller, G. A., College Mound.  
Miller, W. H., Macon.  
Naylor, O., Atlanta.  
Norris, T. J., Macon.

Pipkin, W. D., Excello.  
Raines, A. M., Tenmile.  
Reagan, C. W., Macon.  
Rush, G. B., Lathrop.  
Schwab, B. C., Ardmore.  
Smith, C. W., Keota.  
Smith, E. S., Macon.  
Southern, J. N., Atlanta.  
Tainter, Paul F., Callao.  
Trippier, F. L., College Mound.  
Webb, W. E., Macon.  
Welch, W. A., Callao.

**MADISON COUNTY.**

G. W. GREENWOOD, President.

C. U. DAVIS, Secretary.

**MEMBERS.**

Anthony, C. A., Fredericktown.  
 Barrows, W. Harry, Fredericktown.  
 Cozzens, E. P., Fredericktown.  
 Davis, C. U., Fredericktown.  
 Dines, G. L., Mine LaMotte.

Greenwood, G. W., Fredericktown.  
 Haley, O., Fredericktown.  
 Renfro, J. H., Fredericktown.  
 Slaughter, S. C., Fredericktown.

**MARION COUNTY.**

R. H. GOODIER, President.

F. JANET REID, Secretary.

**MEMBERS.**

Banks, H. L., Hannibal.  
 Baskett, J. N., Hannibal.  
 Bounds, E. H., Hannibal.  
 Bourn, J. J., Hannibal.  
 Bush, F. W., Hannibal.  
 Chilton, J. C., Hannibal.  
 Chowning, Thos., Hannibal.  
 Farrell, J. J., Hannibal.  
 Goodier, Robt. H., Hannibal.

Hays, W. H., Hannibal.  
 Hornback, E. T., Hannibal.  
 Primm, J. M., Hannibal.  
 Reid, F. Janet, Hannibal.  
 Shanks, A. L., Hannibal.  
 Schmidt, Richard, Hannibal.  
 Vandiver, C. E., Palmyra.  
 Waldo, E. E., Hannibal.

**MCDONALD COUNTY.**

E. F. DOTY, President.

M. L. SELLERS, Secretary.

**MEMBERS.**

Beeson, H. O., Noel.  
 Best, W. S., Anderson.  
 Chase, A. U., Tiff City.  
 Denman, J. I., Southwest City.  
 Doty, E. T., Anderson.

Horton, W. H., Jane.  
 Sellers, M. L., Anderson.  
 Smith, B. F., Southwest City.  
 St. John, O., Pineville.

**MERCER COUNTY.**

H. P. CHESMORE, President.

C. R. BUREN, Secretary.

**MEMBERS.**

Bristow, G. M., Princeton.  
 Buren, Chas. R., Princeton.

Chesmore, H. P., Princeton.  
 Copeland, C. C., Mill Grove.

**MILLER COUNTY.**

S. P. HICKMAN, President.

G. D. WALKER, Secretary.

**MEMBERS.**

Allee, W. S., Olean.  
 Bowlin, B. F., Bagnell.  
 Brockman, C. O., Bagnell.  
 Brockman, H. H., Eldon.  
 DeVilbiss, F., Spring Garden.  
 Gilleland, J. L., Olean.

Hickman, S. P., Ulman.  
 Kouns, D. H., Tuscumbia.  
 Nixdorf, A. P., Pleasant Farm.  
 Temple, J. W., Eldon.  
 Walker, G. D., Eldon.

**MISSISSIPPI COUNTY.**

A. J. MARTIN, President.

W. P. HOWLE, Secretary.

**MEMBERS.**

Boggan, P. P., East Prairie.  
 Chapman, A. W., Charleston.  
 Hamner, W. D., Bertrand.  
 Howle, W. P., Charleston.  
 Martin, A. J., East Prairie.

Ogilvie, R. K., Charleston.  
 Rowe, John M., Charleston.  
 Reed, H. L., Charleston.  
 Story, C. A., Diehlstadt.  
 Wallace, G. R., Bertrand.



## MONITEAU COUNTY.

J. B. STEWART, President.

W. R. PATTERSON, Secretary.

### MEMBERS.

Bramel, H. W., McGirk.  
Burke, J. P., California.  
Crum, J. A., California.  
Dearing, W. A., Jamestown.  
Elliott, W. H., Bunceton.  
Freudenberger, H., Centertown.  
Inglis, J. E., Bacon.  
Klueber, H. C., California.  
Latham, W. H., Latham.

Marsh, J. W., Tipton.  
Norman, J. B., California.  
Patterson, W. R., Tipton.  
Popejoy, H. R., High Point.  
Robertson, J. M., Latham.  
Stewart, J. B., Clarksburg.  
Thorpe, A. B., Jamestown.  
Wilson, G. S., Fortuna.

## MONROE COUNTY.

S. M. BROWN, President.

M. C. McMURRAY, Secretary.

### MEMBERS.

Baker, Chas., Santa Fe.  
Bell, W. T., Stoutsville.  
Blankenship, W. R., Madison.  
Bodine, S. M., Paris.  
Brown, John E., Florida.  
Brown, S. M., Monroe City.  
Carver, F. H., Madison.  
Cassity, G. H., Tulip.  
Day, C., Paris.  
Dixon, C. H., Holliday.

Duncan, Edward, Long Branch.  
Ely, A. E., Monroe City.  
Johnson, G. A., Holliday.  
Lloyd, T. B., Paris.  
McMurry, M. C., Paris.  
McNutt, W. B. A., Monroe City.  
Moss, F. M., Paris.  
Payne, H. C., Paris.  
Shobe, H. G., Paris.

## MONTGOMERY COUNTY.

J. L. JONES, President.

W. M. WHEELER, Secretary.

### MEMBERS.

Bonewitz, John, Jonesburg.  
Bellamy, J. A., Middletown.  
Graves, J. F., Montgomery City.  
Hudson, D. O., Montgomery City.

Jones, J. L., Jonesburg.  
Muns, G. E., Montgomery City.  
Nowlin, David, Montgomery City.  
Wheeler, W. M., High Hill.

## MORGAN COUNTY.

W. L. HATLER, President.

J. T. BEALE, Secretary.

### MEMBERS.

Beale, John T., Versailles.  
Blacksten, H. E., Excelsior.  
Bohling, Cord, Pyrmont.  
Hatler, W. L., Barnett.

Hubbard, Joel D., Versailles.  
Kelley, R. Q., Versailles.  
Lutmann, H. M., Versailles.  
Well, Wm., Versailles.

## NEWTON COUNTY.

J. L. LAMSON, President.

HORACE BOWERS, Secretary.

### MEMBERS.

Benton, A. W., Neosho.  
Bowers, H., Neosho.  
Bridges, J. M., Tipton Ford.  
Brown, W. D., Newtonia.  
Campbell, Wm., Seneca.  
Chapman, U. S., Diamond.  
Cravens, W. A., Granby.  
Foster, H. F., Neosho.  
Hancock, J. B., Newtonia.  
Harrison, G. Wm., Newtonia.  
Hodges, J. J., Granby.

Lamson, J. W., Neosho.  
Lamson, R. C., Neosho.  
Langley, J. W., Granby.  
Maas, A., Neosho.  
Mixer, H. M., Neosho.  
Porter, H. L., Seneca.  
Roseberry, E. M., Neosho.  
Russell, S. A., Stella.  
Vancleave, C. T., Neosho.  
Wills, R. L., Neosho.  
Yates, Paul C., Neosho.

## NODAWAY COUNTY.

J. A. LARRABEE, President.

F. R. ANTHONY, Secretary.

## MEMBERS.

Allen, A. B., Maryville.  
 Anthony, F. R., Maryville.  
 Crowson, E. L., Pickering.  
 Cuminins, K. C., Maryville.  
 Day, Hiram, Parnell.  
 Dean, J. W., Maryville.  
 Dean, L. E., Maryville.  
 Heryford, W. B., Pickering.  
 Howell, C. F., Burlington Junction.  
 Kessler, O. C., Ravenwood.  
 Large, S. D., Hopkins.  
 Larrabee, J. A., Barnard.

McClanahan, J. M., Guilford.  
 Mills, H. P., Sheridan.  
 Mills, O. M. P., Grant City.  
 Morrison, J. B., Maryville.  
 Nash, G. A., Maryville.  
 Nesbitt, E. P., Sheridan.  
 Pierpoint, J. E., Skidmore.  
 Pollard, D. A., Barnard.  
 Saylor, H. L., Elmo.  
 Wallis, F. C., Maryville.  
 Wallis, W. M., Maryville.

## PEMISCOT COUNTY.

B. D. CROWE, President.

J. B. LUTEN, Secretary.

## MEMBERS.

Byars, H. T., Caruthersville.  
 Conrad, A. R., Caruthersville.  
 Crowe, N. D., Caruthersville.  
 Farris, J. C., Caruthersville.  
 Hall, L. B., Caruthersville.  
 Hendricks, M. B., Caruthersville.

Hudgings, M. H., Caruthersville.  
 Luten, J. B., Caruthersville.  
 Martin, Chas., Caruthersville.  
 Phipps, G. W., Caruthersville.  
 Tipton, Paul, Cooter.

## PERRY COUNTY.

T. M. HUDSON, President.

F. M. VESSELLS, Secretary.

## MEMBERS.

Blaylock, G. A., Silver Lake.  
 Bowman, C. B., Longtown.  
 Clark, J. P., Perryville.  
 Estel, T. F., Altenberg.  
 Garner, K. C., Crosstown.  
 Hatcher, W. H., Perryville.

Hudson, T. M., Perryville.  
 Manning, L. R., Brewer.  
 Morton, D. F., Perryville.  
 Russel, J. W., Longtown.  
 Vessells, F. M., Perryville.

## PETTIS COUNTY (SEDALIA).

W. C. OVERSTREET, President.

W. J. FERGUSON, Secretary.

## MEMBERS.

Albers, E. A., Smithton.  
 Bronson, I. T., Royal Tribe Bldg.  
 Bohling, C., 5th & Ohio.  
 Bishop, B. T., Hughesville.  
 Cole, H. B., 501 So. Engineer.  
 Cole, W. M., 501 So. Engineer.  
 Collins, M. T., 219 Ilgenfritz Bldg.  
 Cowan, W. G., 504 So. Ohio.  
 Fartright, C. P., Sedalia R. F. D. No. 1.  
 Clabough, O. W., Green Ridge.  
 Oyer, David P., Dresden, Mo.  
 Dunlap, W. O., 108 West Main St.  
 Evans, W. H., Beaman.  
 Ferguson, W. J., 321 So. Ohio.  
 Ferguson, L., Green Ridge.  
 Fisher, Amos T., Citizens' Bank Bldg.  
 Harris, B. W., Georgetown.  
 Ilte, H. A., Green Ridge.  
 Hubbard, Joel D., 13th & Ohio.  
 Kelly, Sam, Ilgenfritz Bldg.

Knott, Minerva, E. 7th St.  
 Love, J. G., M. K. & T. Hosp.  
 McNeil, G. E., M. K. & T. Hosp.  
 Mitchell, J., Lookout.  
 Morley, Frank R., 1003 E. 5th St.  
 Martin, John G., 700 E. Broadway.  
 Overstreet, W. C., 312 S. Ohio.  
 Prowell, J. D., Longwood.  
 Parkhurst, C. L., Houstonia.  
 Sutton, F. L., Hoffman Bldg.  
 Shirk, W. S., Hoffman Bldg.  
 Sands, M. L., Cole Camp.  
 Simonds, Wallace, Katy Bldg.  
 Trader, J. W., 5th & Ohio.  
 Tyler, R. S., Dunksburg.  
 Titworth, G., 508 S. Ohio.  
 Tucker, A. J., Ilgenfritz Bldg.  
 Wood, E. A., Hoffman Bldg.  
 Yancey, E. F., M. K. & T. Hosp.

## PHELPS COUNTY.

B. T. SMITH, President.

S. L. BAYSINGER, Secretary.

### MEMBERS.

Baysinger, S. L., Rolla.  
Breuer, W. H., St. James.  
Cowan, R. B., Edgar Springs.  
Gowins, O. G., St. James.

Johnson, R. L., Rolla.  
Rowe, Samuel B., Rolla.  
Short, Martha J., Rolla.  
Smith, B. T., Newburg.

## PIKE COUNTY.

M. O. BIGGS, President.

T. GUY HETHERLIN, Secretary.

### MEMBERS.

Biggs, M. O., Bowling Green.  
Brown, D. T., Cyrene.  
Hetherlin, T. Guy, Louisiana.

Kennedy, J. J., Frankford.  
Shelton, J. C., New Hartford.  
Tinsley, G. N., Bowling Green.

## PLATTE COUNTY.

ROBERT P. DAVIS, President.

GRUNDY C. COFFEY, Secretary.

### MEMBERS.

Barr, A. C., Linkville.  
Chastain, C. H., Weston.  
Coffey, E. McD., Platte City.  
Coffey, G. C., Platte City.  
Davis, R. P., Woodruff.  
Dinwiddie, F. G., Camden Point.  
Hale, J. M., Dearborn.  
Herndon, A. S., Camden Point.

Moore, M. H., Dearborn.  
Murray, E. W., Parkville.  
Patterson, Henry H., Edgerton.  
Redman, Spence, Platte City.  
Smedley, W. H., Weston.  
Swaney, W. D., Linkville.  
Wilson, R. P. C., Platte City.  
Winn, J. W., Platte City.

## PULASKI COUNTY.

W. L. REAGAN, President.

G. W. ORRICK, Secretary.

### MEMBERS.

Carter, W. C., Dixon.  
Harrison, R. T., Dixon.  
Murphy, H. C., Richland.  
Oliver, Everett A., Richland.  
Orrick, G. W., Crocker.

Quick, G. W., Crocker.  
Reagan, W. L., Richland.  
Rolens, M. F., Dixon.  
Stebbins, N. L., Crocker.  
Thume, Geo. W., Richland.

## PUTNAM COUNTY.

C. H. CARRYER, President.

J. A. TOWNSEND, Secretary.

### MEMBERS.

Carryer, C. H., Hartford.  
Cozad, F. A., Powersville.  
Ellis, A. D., Powersville.  
Fretwell, W. J., Unionville.  
Geisinger, E. J., Unionville.  
Gray, L. L., St. John.  
Haynes, Lee, Mendota.

Holman, J. H., Unionville.  
Montgomery, E. A., Unionville.  
Noel, Frank, Unionville.  
Rice, F. D., Lucerne.  
St. John, T. L., Howland.  
Townsend, J. A., Unionville.

## RALLS COUNTY.

O. B. HICKLIN, President.

T. J. DOWNING, Secretary.

### MEMBERS.

Birney, W. L., Oakwood.  
Downing, T. J., New London.  
Downing, S. W., Perry.  
Graves, C. H., Center.  
Horwood, W. S., Rensselaar.  
Hendrix, W. S., New London.  
Hicklin, O. B., New London.  
Miles, A. W., Perry.

Moore, F. M., Perry.  
Monroe, Thos., Center.  
McCullom, R. W., Center.  
Ragen, Sam., New London.  
Walter, Fred. E., Perry.  
Waters, Thos. E., New London.  
Wix, F. M., Center.  
Winn, Marven, Saverton.



**RANDOLPH COUNTY.**

G. O. CUPPAIDGE, President.

W. M. DICKERSON, Secretary.

**MEMBERS.**

Adams, S. C., Huntsville.  
 Barnhart, D. A., Huntsville.  
 Brown, A. J., Higbee.  
 Clapp, C. B., Moberly.  
 Cuppaidge, G. O., Moberly.  
 Dickerson, W. M., Renick.  
 McCormack, Frank, Darksville.  
 Mangus, T. D., Moberly.

Mangus, C. W., Moberly.  
 Magee, W. K., Moberly.  
 Nichols, G. W., Higbee.  
 Rafter, J. G., Huntsville.  
 Shrader, E. W., Moberly.  
 Touis, S. P., Jacksonville.  
 Woods, R. A., Clark.

**RAY COUNTY.**

CHAS. B. SHOTWELL, President.

L. D. GREENE, Secretary.

**MEMBERS.**

Craven, Y. D., Lawson.  
 Cook, T. B., Rayville.  
 Crowley, C. C., Richmond.  
 Gosney, C. W., Hardin.  
 Greene, L. D., Richmond.  
 Griffin, J. M., Millville.  
 Grimes, M., Hardin.  
 Hamilton, R. L., Richmond.

Higdon, E. F., Richmond.  
 McGaugh, E. T., Richmond.  
 Mussen, E. H., Rockingham.  
 Sevier, R., Richmond.  
 Shotwell, C. B., Richmond.  
 Sheets, Robt., Orrick.  
 Smith, James W., Richmond.

**REYNOLDS COUNTY.**

J. M. LOWERY, President.

T. W. CHILTON, Secretary.

**MEMBERS.**

Chilton, T. W., Corridon.  
 Cloonan, M., Ruble.  
 Copeland, W. A., Ellington.  
 Lowery, J. M., Centerville.

McKenzie, D. H., Lesterville.  
 Moffitt, J. H., Redford.  
 Moore, J. H., Centerville.  
 O'Dell, T. T., Ellington.

**SALINE COUNTY.**

D. C. GORE, President.

D. F. BELL, Secretary.

**MEMBERS.**

Chastain, M. F., Marshall.  
 Crank, A. C., Herndon.  
 Gore, D. C., Marshall.  
 Hall, J. R., Marshall.

Howard, F. A., Slater.  
 Spotts, B. M., Marshall.  
 Shuck, L. I., Nelson.

**SCHUYLER COUNTY.**

E. L. MITCHELL, President.

H. E. GERWIG, Secretary.

**MEMBERS.**

Bridges, J. B., Downing.  
 Gerwig, H. E., Downing.  
 Jones, J. T., Queen City.  
 Justice, W. F., Lancaster.  
 Keller, J. H., Glenwood.

Mitchell, E. L., Lancaster.  
 Mitchell, W. F., Lancaster.  
 Rambo, J. H., Glenwood.  
 Potter, B. B., Lancaster.

**SCOTLAND COUNTY.**

W. E. ALEXANDER, President.

O. F. PILE, Secretary.

**MEMBERS.**

Alexander, W. E., Memphis.  
 Bondurant, W. E. H., Memphis.  
 Davis, A. L., Arbela.  
 Johnson, F. M., Gorin.  
 Mackey, A. H., Gorin.

Maynard, Geo. K., Hitt.  
 Parrish, E. E., Memphis.  
 Parrish, J. E., Memphis.  
 Pile, O. F., Memphis.  
 Platter, A. E., Memphis.

**SHELBY COUNTY.**

H. C. VAUGHAN, President.

A. M. WOOD, Secretary.

**MEMBERS.**

Carson, Wm., Shelbyville.  
 Chapman, Chas., Shelbyna.  
 Dallas, L. W., Hunnewell.  
 Devin, J. F., Shelbyville.  
 Dobson, D. A., Hunnewell.  
 Owen, W. W., Oak Dale.

Pollard, H. M., Shelbyna.  
 Reed, M. M., Clarence.  
 Smith, J. D., Shelbyna.  
 Vaughan, H. C., Shelbyna.  
 Wood, A. G., Lentner.  
 Wood, A. M., Lentner.

**STE. GENEVIEVE COUNTY.**

M. ANDRE, President.

F. H. HINCH, Secretary.

**MEMBERS.**

Andre, M., Ste. Genevieve.  
 Burgess, L. McD., St. Marys.  
 Counts, H. L., Avon.  
 Hertic, C. J., Ste. Genevieve.  
 Hinch, F. E., Ste. Genevieve.

Lanning, R. W., Ste. Genevieve.  
 Meyer, A. G., Ste. Genevieve.  
 Moore, C., St. Marys.  
 Morganstein, H. J., Weingarten.  
 Rutledge, G. M., Ste. Genevieve.

**STODDARD COUNTY.**

D. R. CORBIN, President.

JNO. ASHLEY, Secretary.

**MEMBERS.**

Allen, T. C., Bernie.  
 Ashley, John, Bloomfield.  
 Brandon, J. P., Essex.  
 Caldwell, W. C., Essex.  
 Corbin, D. R., Bloomfield.  
 Douglas, Jno., Dexter.  
 Evans, S. M., Bloomfield.

LaRue, Harry, Dexter.  
 Moore, Ed., Bloomfield.  
 Phillips, Eldon, Bloomfield.  
 Tiller, J. A., Leora.  
 Vernon, Geo., Dexter.  
 Wilson, Eli, Leora.  
 Wingo, T. B., Dexter.

**ST. CHARLES COUNTY.**

J. R. MUDD, President.

B. K. STUMBERG, Secretary.

**MEMBERS.**

Baller, H., Cottleville.  
 Bitter, Carl, St. Charles.  
 Bruere, John, St. Charles.  
 Dunn, F. P., St. Peters.  
 Gossow, A., St. Charles.  
 Hardy, Wm. F., St. Charles.

Morgner, O., St. Charles.  
 Mudd, J. R., St. Charles.  
 Stumberg, B. K., St. Charles.  
 Tainter, E. J., St. Charles.  
 Wentker, B. P., St. Charles.

**ST. CLAIR COUNTY.**

W. C. CLINE, President.

E. D. MILES, Secretary.

**MEMBERS.**

Bell, W. E., Osceola.  
 Cline, W. C., Appleton City.  
 Pingrey, W. B., Ralston, Okla.  
 SeEVERS, John, Osceola.

Smith, R. J., Appleton City.  
 Sullivan, E. W., Osceola.  
 Williams, D. B., Osceola.

**ST. LOUIS COUNTY.**

H. G. WYER, President.

H. T. RANDLE, Secretary.

**MEMBERS.**

Armstrong, C. L., Webster Grove.  
 Bates, Conway, Clayton.  
 Berry, J. M., Webster Grove.  
 Campbell, A. V., Glendale.  
 Coleman, H. T., Pattonville.

Dalton, Martin, Fenton.  
 Denny, R. B., Eureka.  
 Douglass, J. T., Ferguson.  
 Dunnivant, C. A., Kirkwood.  
 Eatherton, J. W., Allenton.

Gallagher, J. C., Valley Park.  
Greensfelder, H. B., Kirkwood.  
Guibor, F. E., Maplewood.  
Ham, W. J., Creve Coeur.  
Higgins, R. M., Webster Grove.  
Jensen, N. N., Florissant.  
Kinner, Wm., Ferguson.  
Loving, S. R., Pond.

Moore, R. D., Central.  
Pfister, J. D., Fern Ridge.  
Pitman, John, Kirkwood.  
Randle, H. T., Clayton.  
Reynolds, S. H., Maplewood.  
Thurman, E. J., Fenton.  
Wyer, H. G., Kirkwood.

## ST. LOUIS CITY.

FRANK L. HENDERSON, President.

T. A. HOPKINS, Secretary.

### MEMBERS.

Abeken, F. W., 3531 S. Broadway.  
Albrecht, F. H., 3763 Westminster Pl.  
Allison, N., Linmar Bldg.  
Allyn, A. B., 3136 Morganford Road.  
Alt, A., 3036 Locust St.  
Althans, Carl, 2848 Accomac St.  
Ambrose, A. O., 313 N. 9th St.  
Amyx, R. F., 1943 N. 11th St.  
Amerland, J. H., 2739 Chippewa St.  
Apperson, E. L., 536 N. Taylor Ave.  
Atkins, H. S., Insane Asylum.  
Atkinson, R. C., 3002 Lafayette Ave.  
Aufderheide, W. D., 2754 Arsenal St.  
Auler, H. A., 2708 Lynch St.  
Ayars, T. R., 3739 Euclid Ave.  
Babler, E. A., 617 Euclid Ave.  
Bailey, F. W., City Hospital.  
Baker, R. W., 1438 Pendleton Ave.  
Ball, J. M., 3509 Franklin Ave.  
Ball, O. F., Linmar Bldg.  
Barck, C., 2715 Locust St.  
Barclay, R., 3894 Washington Ave.  
Bardenheier, F. G. A., City Hospital.  
Barnard, A. L., 2931 Easton Ave.  
Barnes, A. S., 5434 Maple Ave.  
Barnes, A. S., Jr., Mo. Trust Bldg.  
Bartlett, W., 4257 Washington Ave.  
Bauduy, W. K., 2808 Olive St.  
Bauer, C. E., 2104 N. 14th St.  
Baumgarten, G., 2608 Locust St.  
Baumgarten, W., 2647 Washington Ave.  
Becker, W. H., 4743 Labadie Ave.  
Bedal, A. C., 3418 Lucas Ave.  
Behrens, L. H., 5 S. Broadway.  
Bishop, F. L., 516 N. Garrison Ave.  
Black, W. D., 1411 California Ave.  
Blair, V. P., Linmar Bldg.  
Bliss, M. A., 3561 Olive St.  
Block, Robt. C., Linmar Bldg.  
Bock, A. F., 1107 N. Grand Ave.  
Boisliniere, L. C., 3533 Olive St.  
Boehm, J. L., 3806 Delmar Ave.  
Bond, H. W., Linmar Bldg.  
Bond, Y. H., 315 N. Grand Ave.  
Boogher, F., High & Carr Sts.  
Boogher, J. L., Mo. Trust Bldg.  
Booth, D. S., Linmar Bldg.  
Bradley, A. H., 1019 N. 21st St.  
Brandenberger, L. H., 2900 Eads Ave.  
Breed, M. E., 1018 Hamilton Ave.  
Bremer, L., 3723 W. Pine.  
Bribach, B., 7608 Michigan Ave.  
Broderick, J. K., Vanol Bldg.  
Brokaw, A. V. L., 536 N. Taylor Ave.  
Brooks, H. S., 3557 Lafayette Ave.  
Brown, L. S., 536 N. Taylor Ave.  
Brown, J. Y., City Hospital.  
Buck, T. E., 2610 S. 26th St.  
Buckwalter, J. C., Carleton Bldg.  
Burford, C. E., 932 Hamilton Ave.  
Burnett, E. C., Century Bldg.  
Burns, R., 612 N. Taylor Ave.  
Cadwallader, I. H., 919 N. Taylor Ave.  
Campbell, G., 3429 Morgan St.  
Cape, L. W., Sutton & Hazel.  
Caplan, L., 309 Century Bldg.  
Carley, H. D., 3419 Bell Ave.

Carman, R. D., 4318 Olive St.  
Carson, N. B., 3561 Olive St.  
Carson, G. W., 301 Century Bldg.  
Chaddock, C. G., 3750 Lindell Bl.  
Chapman, H. N., 3821 Delmar Ave.  
Clark, W. J.  
Clemens, Jas., 3720 Pine St.  
Clopton, M. B., 2604 Locust St.  
Cobb, C. D., 2900 Washington Ave.  
Colassowitz, A., 2921 S. Broadway.  
Connolly, P. D., 2556 N. Grand Ave.  
Cooney, D. C., 4247 Finney Ave.  
Crandall, G. C., 4287 Olive St.  
Creveling, H. C., 219 N. Sarah St.  
Crossen, H. S., 4477 Delmar Ave.  
Cummings, H. J., 1200 N. Grand Ave.  
Curl, J. L., 2901 Clifton Ave.  
Dalton, H. C., 3536 Easton Ave.  
Davis, L. H., 1017 Park Ave.  
Davis, W., 5013a Page Ave.  
Dean, J. M., 319 N. Grand Ave.  
Deutsch, W. S., 3135 Washington Ave.  
Dickerson, W. L., 5443 Washington Ave.  
Dorsett, Walter B., Linmar Bldg.  
Dorsey, B. L., 1422 N. Taylor Ave.  
Drace, C. C., City Dispensary.  
Dudley, C. R., Linmar Bldg.  
Duncan, J. H., Century Bldg.  
Eberlein, E. W., 1208 Dillon St.  
Ehrenfest, H., Vanol Bldg.  
Elbrecht, O. H., Female Hospital.  
Engman, M. F., 2608 Locust St.  
Epstein, M. J., 1905 N. 11th St.  
Ewing, F. C., Century Bldg.  
Eyer mann, E. H., 1800 S. Broadway.  
Faber, J. E., 2123 S. 26th St.  
Fahlen, F., 116 N. Grand Ave.  
Falk, J. C., 2701 Stoddard St.  
Ferrel, H. E., 822 N. Grand Ave.  
Fisch, C., 3112 Pine St.  
Fishel, W. E., 2647 Washington Ave.  
Fischer, W., 3554a Olive St.  
Fleming, A. W., 4130 Manchester Road.  
Forster, O. E., Carleton Bldg.  
Forster, D., 6209 Easton Ave.  
Forsythe, Robert C., Linmar Bldg.  
Fowler, S. R., Carleton Bldg.  
Fox, S. D., 2846 Manchester.  
Frankenthal, M., 4163 McPherson Ave.  
Freudenstein, W. H., 3836 Clark Ave.  
Freund, N. M., 1440 S. 18th St.  
Friedman, J., 308 N. 6th St.  
Frielingsdorf, E. H., 2202 S. Broadway.  
Fry, F. R., Linmar Bldg.  
Fuchs, W. H., 2830 Lafayette Ave.  
Fuhrmann, R. H., 3221 California Ave.  
Fulton, A. L., 617 Chouteau Ave.  
Funkhouser, R. M., 4354 Olive St.  
Furney, E. E., 3417 Morgan St.  
Gamble, D. C., 644 Century Bldg.  
Garstang, D. B., Linmar Bldg.  
Gayler, W. C., 3904 Laclede Ave.  
Gehrunge, E. C., Linmar Bldg.  
Geitz, H. A., 2942 Washington Ave.  
Gellhorn, Geo., Linmar Bldg.  
Glasgow, F. A., 3894 Washington Ave.  
Glasgow, W. C., 2847 Washington Ave.



Goebel, A., 3508 Manchester.  
 Goldstein, M. A., 3858 Westminster Pl.  
 Golland, M., 1712 Carr St.  
 Goodloe, H., Vanol Bldg.  
 Goodwin, E. J., Linmar Bldg.  
 Gradwohl, R. B. H., 5001 Fairmount Ave.  
 Graham, S. E., 1417 Newstead Ave.  
 Grant, J. M., 4132 Easton Ave.  
 Graves, S. C., 3603 Lindell Bl.  
 Graves, W. W., Vanol Bldg.  
 Green, John, Jr., Vanol Bldg.  
 Greer, E. O., 2750 Park Ave.  
 Griffin, P. H., 2730 Washington Ave.  
 Grindon, Joseph, 3894 Washington Ave.  
 Gross, J. H., 306 Oriol Bldg.  
 Guhman, J. O., 2608 Olive St.  
 Guhman, M. J., 3505 N. 26th St.  
 Guhman, Chas., N. 43rd & Finney Ave.  
 Haase, M. E., 1105 S. 7th St.  
 Hall, W. P., 2332 Washington Ave.  
 Hall, H. R., 925 Goodfellow Ave.  
 Hardaway, W. A., 2922 Locust St.  
 Harnisch, H. D., 2407 S. 18th St.  
 Harris, D. L., 926 Academy St.  
 Harris, R. C., 1303 N. Garrison Ave.  
 Hartwig, O. A., 927 Market St.  
 Hawley, N. J., Century Bldg.  
 Hawley, T. S., 3065 Easton Ave.  
 Helwig, H. J., 2804 Manchester Ave.  
 Hempel, Max, 3857 N. Grand Ave.  
 Henckler, E. H., 2237 Chouteau Ave.  
 Henderson, F. L., 310 Century Bldg.  
 Henke, A. F., 2210 Howard St.  
 Hennerich, J. P., 2921 S. Broadway.  
 Herschenroeder, L. C., 2904 Park Ave.  
 Hermann, H. W., 1127 N. Grand Ave.  
 Heuer, Phil H., 303 N. Grand Ave.  
 Heyer, C., 910 N. 10th St.  
 Higbee, E. H., 4952 Park View Pl.  
 Hill, R., 4605 Delmar Ave.  
 Hirschi, W. T., 2217 N. Grand Ave.  
 Hochderfer, D. F., 308 N. 6th St.  
 Hoehffer, J. P., 2304 S. Compton Ave.  
 Hoffman, P., 3337 Washington Ave.  
 Hoge, M. W., Linmar Bldg.  
 Holtgrewe, F. W., 1601 Blair Ave.  
 Homan, G., Odd Fellows Bldg.  
 Hopkins, M. J., 3400 Olive St.  
 Hopkins, T. A., 319 Century Bldg.  
 Horwitz, M. R., 3000 Olive St.  
 Houser, K., Century Bldg.  
 Houck, E. F., 1638 S. 26th St.  
 Houck, L., 903 Morrison Ave.  
 Howard, A. P., Linmar Bldg.  
 Hughes, C. H., 3872 Washington Ave.  
 Hypes, B. M., 2005 Victor St.  
 Jacobson, H., Mo. Trust Bldg.  
 James, J. A. J., Carleton Bldg.  
 Jennings, J. E., Carleton Bldg.  
 Johnson, E. H., 2507 N. Spring Ave.  
 Johnson, F. P., 3744 Finney Ave.  
 Johnson, W. L., 2241 S. Grand Ave.  
 Johnson, H. McC., Linmar Bldg.  
 Jonas, E., 2329 Locust St.  
 Jones, H. W., Linmar Bldg.  
 Jones, M. D., 4068 Washington Ave.  
 Jordan, A. P., 2755 Osage St.  
 Kane, R. E., 1123 N. Grand Ave.  
 Keber, J. B., 448 Century Bldg.  
 Keeble, R. R., Mo. Pac. Hospital.  
 Keith, W. F., Carleton Bldg.  
 Kessler, E. H., 3446 Shenandoah Ave.  
 Kennedy, W. C., 18th & Cass Ave.  
 Kieffer, A. R., 4268 W. Belle Pl.  
 Kieffer, Victor E., City Hospital.  
 Kier, W. F., 3609 Lindell Bl.  
 Kimball, A. C., Grand & Franklin Ave.  
 Kirchner, W. G. C., 1211 N. Grand Ave.  
 Klein, S., 1921 N. Grand Ave.  
 Koetter, A. F., 1023 N. Grand Ave.  
 Krebs, G. A., 2709 S. 11th St.  
 Krebs, F. J. V., 2816 N. 14th St.  
 Krenning, W. J., 4326 Easton Ave.  
 Kuhn, D., 1746 Chouteau Ave.  
 Laidley, L. H., 308 N. 6th St.  
 Lange, A. F., 2755 Osage St.  
 Larew, J. L., 3030 Morgan St.  
 Lawrence, W. S., 1913 N. Grand Ave.  
 Lebrecht, J. C., 900 S. 4th St.  
 Leighton, W. E., 3339 Lucas Ave.  
 Lemen, J. R., Vanol Bldg.  
 Lewis, Bransford, 627 Century Bldg.  
 Lewis, Chas., 1402 Monroe St.  
 Levy, A., Lister Bldg.  
 Lightner, C. R., 2313 Washington Ave.  
 Ling, J. J., Mermod-Jaccard Bldg.  
 Lippe, M. J., 4321 W. Belle Pl.  
 Lischer, R. F., 3894 Washington Ave.  
 Loeb, C., 3559 Olive St.  
 Loeb, H. W., 3559 Olive St.  
 Long, J. M., 513 Sarah St.  
 Luedeking, R., 1837 Lafayette Ave.  
 Luton, L. S., 1023 N. Grand Ave.  
 Lutz, F. J., 1630 S. Grand Ave.  
 Lyman, H., Carleton Bldg.  
 Mann, F. P., 1536 Papin St.  
 Mardorf, W. C., 1111 Chouteau Ave.  
 Marks, H., 2930 Morgan St.  
 Martin, T. A., Century Bldg.  
 Marx, Ella, 505 N. Theresa Ave.  
 Max, C. O. C., 2747 Lafayette Ave.  
 McCandless, W. A., 3857 Westminster.  
 McClure, J., 1702 Market St.  
 McKay, H. S., 2643 Geyer.  
 Meisenbach, A. H., 2229 S. Broadway.  
 Melvin, J. M., 3205 Washington Ave.  
 Menestrina, J. F., 3409 Washington Ave.  
 Meng, E. R., 728 N. Taylor Ave.  
 Meyer, H. H., 1823 N. Taylor Ave.  
 Miller, H. E., 2257 Missouri Ave.  
 Miller, J. J., 4439 Morgan St.  
 Mills, R. Walter, 2235 S. Vandeventer Ave.  
 Mook, W. H., 2602 Locust St.  
 Moore, B. W., 3634 Washington Ave.  
 Moore, H. M., Linmar Bldg.  
 Moore, J. G., 5259 Page Bl.  
 Moore, J. W., 906 Pine St.  
 Moore, W. G., 86 Vandeventer Pl.  
 Morfit, J. C., 5101 Morgan St.  
 Morris, C. C., 2945 Franklin Ave.  
 Mosby, C. V., 2313 Washington Ave.  
 Mudd, H. G., 2604 Locust St.  
 Mueller, E., 3334 California Ave.  
 Muetze, Henry, 3201 Shenandoah Ave.  
 Murphy, J. C., 4263 Morgan St.  
 Murphy, R. B., 6035 Manchester Ave.  
 Myer, J. S., 3894 Washington Ave.  
 Neuhoof, F., 1318 Chouteau Ave.  
 Newman, L. E., 449 Century Bldg.  
 Nicholson, C. M., Lister Bldg.  
 Nietert, H. L., Century Bldg.  
 Nifong, F. H., 704 N. Kingshighway.  
 Norris, E. J., 4323 Russell Ave.  
 North, E. P., 3920 Russell Ave.  
 Ohmann-Dumesnil, A. H., 5 S. Broadway.  
 O'Reilly, R. J., 602 N. 7th St.  
 Orr, C. J., 3343 Morgan St.  
 Outten, W. B., Mo. Pac. Hospital.  
 Padberg, L. R., 2759 Armand.  
 Patton, F. W., 5617 Maple Ave.  
 Pfefferberger, J. M., City Hospital.  
 Phillips, G. M., 520 Olive St.  
 Pierce, H. M., 4046 N. Grand Ave.  
 Pim, L. T., Mo. Trust Bldg.  
 Pollman, L. P., 2002 St. Louis Ave.  
 Popper, M., Mermod-Jaccard Bldg.  
 Porter, Wm., 520 Olive St.  
 Post, H. M., 27th & Washington Ave.  
 Powell, C. H., Century Bldg.  
 Pritchard, J. B., 3203 Easton Ave.  
 Printz, H., Century Bldg.  
 Rassieur, L., City Hospital.  
 Ravold, A., 312 Century Bldg.  
 Reder, F., 4629 Cook Ave.  
 Remme, C. F., 400 S. 14th St.  
 Rice, D. F., Century Bldg.

Riesmeyer, L. T., 2838 Lafayette Ave.  
 Riley, C. M., Alton, Ill.  
 Ring, Frank, Chemical Bldg.  
 Rinninger, Wm., 1100 Madison St.  
 Robertson, W. M., 2608 Locust St.  
 Rohlfing, C. G., 1200 N. 8th St.  
 Rohlfing, H. A. L., 2602 Laclede Ave.  
 Rohlfing, L. C., 3914 Maffit Ave.  
 Rosebrough, F. H., Grand & Bell.  
 Ross, J. B., 1908 E. Grand Ave.  
 Rothstein, H. B., 3309 S. 13th St.  
 Rule, J. B., Olivia Bldg.  
 Rumbold, F. M., 450 Century Bldg.  
 Rush, W. M., 805 N. Grand Ave.  
 Salter, J. C., 520 N. Grand Ave.  
 Sauer, W. E., Olivia Bldg.  
 Saunders, E. W., 3003 Lafayette Ave.  
 Saxl, Ernst, Century Bldg.  
 Scherck, H. J., 403 Century Bldg.  
 Schisler, E., 2027 S. Jefferson Ave.  
 Schlossstein, A., 2401 S. Broadway.  
 Schlossstein, A. G., 3153 Longfellow.  
 Schlueter, R. E., 720 S. 4th St.  
 Schmalhorst, D. E., 8111 N. Broadway.  
 Scholz, P., 3403 N. 14th St.  
 Scholz, R. P., 1110 Ferry St.  
 Schuchat, W. L., 2200 Chouteau Ave.  
 Schulz, H. W., 2603 Cherokee Ave.  
 Schwab, S. I., Vanol Bldg.  
 Schwarze, H., 440 N. Newstead Ave.  
 Schwarze, A., 2921 S. Jefferson Ave.  
 Shapleigh, J. B., 2608 Locust St.  
 Sharpe, N. W., 3505 Franklin Ave.  
 Shattinger, C., 2924 S. Grand Ave.  
 Shields, W. B., Linmar Bldg.  
 Shoemaker, J. F., Carleton Bldg.  
 Shoemaker, W. A., 1006 Carleton Bldg.  
 Shutt, C. H., City Hospital.  
 Senseney, E. M., 2829 Washington Ave.  
 Sieving, H. J. C., 1125 St. Louis Ave.  
 Simon, J. H., 4104 Manchester Ave.  
 Sluder, G., 2647 Washington Ave.  
 Smith, Elsworth, 116 N. Grand Ave.  
 Smith, J. C., 3634 Washington Ave.  
 Smith, J. W., Mermood-Jaccard Bldg.  
 Snodgrass, C. A., 1624 Chestnut St.  
 Soper, H. W., 813 N. 15th St.  
 Spain, K. C., Carleton Bldg.  
 Spencer, H. N., 2723 Washington Ave.  
 Spiegelhalter, J., 2166 Lafayette Ave.

Spooner, E. H., 1116 Talmage Ave.  
 Stauffer, W. H., 1023 N. Grand Ave.  
 Steedman, J. G. W., 2803 Pine St.  
 Steer, J., 3126 Washington Ave.  
 Stevens, C. D., 1749 S. Grand Ave.  
 Stewart, F., 1001 Olive St.  
 Stocking, L. C., 1304 Academy Ave.  
 Stockwell, B. E., 2345 S. Broadway.  
 Suggett, O. L., 423 Commercial Bldg.  
 Summa, Hy. H., 3707 N. 11th St.  
 Summa, Hugo, 2249 St. Louis Ave.  
 Sutter, O., Century Bldg.  
 Stoffel, R. J., 2754 Armand Ave.  
 Talbott, H., 3153 Laclede Ave.  
 Tanquary, J. H., 930 Belt Ave.  
 Taussig, A. E., 2318 Lafayette Ave.  
 Taussig, F. G., 534 N. Vandeventer.  
 Tiedemann, E. F., 2253 S. Vandeventer.  
 Tooker, Chas. W., Jr., 4326 Pine St.  
 Trotman, C. A., 3524 Lawton Ave.  
 Tuholskee, H., 465 N. Taylor Ave.  
 Tupper, P. Y., 534 N. Vandeventer Ave.  
 Tuttle, G. M., 3509 Morgan St.  
 Valle, J. F., 3303 Washington Ave.  
 Vandover, S. T., 1536 Papin St.  
 Vaughan, J. W., 4001 W. Belle Pl.  
 Viedt, E. J., 2305 California Ave.  
 Vogt, G. W., 1455 Blair Ave.  
 Vogt, W. H., 1455 Blair Ave.  
 Vollmer, P., 2358 S. 12th St.  
 Von der Au, O. L., 1301 Geyer Ave.  
 Vosberg, C. A., Centenary Hospital.  
 Ware, Chas., 1404 Olive St.  
 Warfield, L. M., Chemical Bldg.  
 Wesseler, F. W., 2308 Gravois Ave.  
 Whelpley, H. M., 2342 Albion Pl.  
 Wiatt, W., East St. Louis, Ill.  
 Wichmann, H. L., 1418 S. 17th St.  
 Wiener, M., 500 Carleton Bldg.  
 Wilkes, B. A., Linmar Bldg.  
 Williamson, J. W., 5600 Cates Ave.  
 Wilson, A., 1514 Wagoner Pl.  
 Wilson, R. E., 512 Mo. Trust Bldg.  
 Wilson, W. A., 1536 Papin St.  
 Winter, Wm., 3632 S. Broadway.  
 Witherspoon, T. C., 4318 Olive St.  
 Wolfner, H. L., Carleton Bldg.  
 Woodruff, F. E., 2925 Washington Ave.  
 Zahorsky, John, 1460 S. Grand Ave.  
 Zoller, C. H., 1235 N. Grand Ave.

## SULLIVAN COUNTY.

J. C. KESSINGER, President.

J. S. MONTGOMERY, Secretary.

### MEMBERS.

Helton, J. W., Green City.  
 Mairs, E. J., Newtown.  
 Montgomery, J. S., Milan.

Porter, E. S., Milan.  
 Widner, A. W., Newtown.  
 Witter, W. L. M., Milan.

## VERNON COUNTY.

H. C. JARVIS, President.

T. B. TODD, Secretary.

### MEMBERS.

Adams, W. T., Richards.  
 Buchanan, J. Robt., Nevada.  
 Bohannon, W. T., Nevada.  
 Churchill, E. R., Nevada.  
 Craig, T. B. M., Nevada.  
 Callaway, L. H., Nevada.  
 Davis, C. B., Walker.  
 Johnson, S. A., Nevada.  
 Jarvis, H. C., Shell City.

Keithly, C. L., Nevada.  
 Milikan, G. S., Shell City.  
 Popplewell, W. H., Sheldon.  
 Robinson, J. F., Nevada.  
 Smith, A. P., Ketterman.  
 Todd, T. B., Richards.  
 Truex, J. L., Milo.  
 Wilson, G. C., Nevada.

## WARREN COUNTY.

W. J. ALEXANDER, President.

E. A. FLUESMEIER, Secretary.

### MEMBERS.

Alexander, W. J., Marthasville.  
Dyer, J. H., Warrenton.  
Foreman, J., Warrenton.  
Fluesmeier, E. A., Wright City.

Graham, A. W., Warrenton.  
McKinney, Geo. F., Warrenton.  
Mitchell, E. G., Wright City.  
Stewart, James, Holstein.

## WASHINGTON COUNTY.

J. A. EATON, President.

W. S. SMITH, Secretary.

### MEMBERS.

Eaton, J. A., Belgrade.  
Ford, David, Richwoods.  
Hall, Jas. H., Potosi.  
Hall, L. T., Potosi.

Parker, W. H., Anthonies Mills.  
Parker, W. J., Berryman.  
Smith, W. S., Belgrade.  
Townsend, J. P., Potosi.

## WAYNE COUNTY.

L. M. PETTIT, President.

I. N. BARNETT, Secretary.

### MEMBERS.

Atkins, F. R., Jackson.  
Bailey, W. S., Leeper.  
Barnett, I. N., Piedmont.  
Gilmer, J. E., Piedmont.  
Montgomery, J. M., Lowndes.

Owens, R. J., Mill Spring.  
Sebastian, J. P., Patterson.  
Sheets, C. C., Greenville.  
Toney, G. W., Piedmont.



# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	G. W. Lott	Ulesboro	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Kenoma.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas W Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	C. C. Leeper	Braymer	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	E. P. Potterfield	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Chariton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harfis	Winchester	A. C. Bridges	Sahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Platte City.
Cole	J. P. North	Jefferson City	G. Etmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	R. S. Holman	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-				
Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	J. A. Asher	Trenton	W. D. Fulkerson	Trenton.
Henry	Jno. H. Britts	Clinton	F. M. Douglas	Clinton.
Holt	B. T. Quigley	Mound City	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	S. S. Brown	Edina	Henry J. Jurgen	Edina.
Laclede	J. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	E. S. Smith	Macon	G. B. Rush	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmore	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman	Uman	G. D. Walker	Eldon.
Mississippi	A. J. Martin	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurtry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	I. W. Lamson	Neosho	Horace Bowers	Neosho.
Nodaway	J. A. Larrabee	Barnard	F. R. Anthony	Maryville.
Pemiscot	D. B. Crowe	Caruthersville	J. G. Luten	Caruthersville.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
PHELPS	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Quick	Crocker.
Putnam	C. H. Carryer	Hartford	T. A. Townsend	Unionville.
Ralls	O. B. Hicklin	New London	T. J. Downing	New London.
Randolph	G. O. Cuppaidge	Moberly	W. M. Dickerson	Renick.
Ray	Chas. B. Shotwell	Richmond	L. D. Greene	Richmond.
Reynolds	I. M. Lowery	Centerville	T. W. Chilton	Corridon.
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	A. A. Gossow	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	I. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	H. C. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	I. C. Kessenger	Milan	J. S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City.
Washington	I. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	L. M. Pettit	Greenville	I. N. Barnett	Piedmont.

# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Monthly. Second Tuesday.
Carter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday. April, July, October, January.
Daviess .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. First Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Monthly.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Henry .....	Monthly. Second Tuesday.
Holt .....	Quarterly. January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Semi-Annually. First Mondays May and November.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Monthly. First Wednesday.
Macon .....	Monthly. On or before full moon, Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Moniteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Monthly.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Portland, Oregon, July 11th to 14th, 1905.

President-Elect: LOUIS S. McMURTRY, Louisville, Ky.

President: JOHN H. MUSSER, Philadelphia, Pa.

First Vice-President: EDWARD JACKSON, Denver, Colo.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

President: D. C. GORE, Marshall, Mo.

Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, Laclede; F. A. GLASGOW, St. Louis; T. F. LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

## COMMITTEES.

### Committee on Scientific Work.

C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.

### Publication Committee.

C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes; W. B. Dorsett.

### Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, **Lewis**.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Fayetteville. Counties: Clay, Ray, Platte, Clinton, Caldwell, **DeKalb**, **Gentry**, **Harrison**, **Worth**, **Daviess**.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, **St. Francois**, **Reynolds**, **Iron**, **Perry**, **St. Genevieve**.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, **New Madrid**, **Wayne**, **Stoddard**, **Dunklin**, **Butler**, **Ripley**, **Carter**, **Pemiscot**.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: **Bollinger**, **Scott**, **Madison**, **Cape Girardeau**.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, **St. Clair**, **Benton**, **Saline**, **Hickory**, **Cooper**.

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Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, **Dade**, **Barton**, **Cedar**, **Vernon**.

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\*Counties in black type are unorganized.



# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

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## ORIGINAL ARTICLES.

### TUBERCULOSIS THE PROBLEM FOR THE GENERAL PRACTITIONER.\*

BY WILLIAM PORTER, M. D., of St. Louis.

Each age brings its opportunities and conquests. If the man who makes two blades of grass to grow in place of one is a benefactor, the physician who saves one life where, otherwise, two were doomed, is something more. In speaking to the general practitioner to-day I have a hesitancy, born of recognition of the strength and sanctity of his relationship to the people. The typical friend and protector is the skilled physician, intrenched in the confidence of the community, familiar with the history and tendency of each family, possibly of each member of the family; ready at all times to bring his skill and sympathy to aid in the hour of supreme need. Yet it is the knowledge of this very relationship that impels the earnest student of tuberculosis to reach out for the strong grasp of the family physician, and to say if there is to be a limit set to this dread disease it must be your work, rather

than that of the specialist and the worker in the laboratory. It is yours to see the foe in the home and its strongholds, even before it is aggressive; we but see it after more mature development. In this short paper I want to urge a few propositions, not new or complete, but thoughts that may set us all to thinking—words that may be the precursor of deeds.

The necessity for our best effort is great. At present rates about seven millions of people now living in the United States will die of tuberculosis—in your state and mine, in each village and hamlet and home, at least one-tenth! In the families of which we of this association are guardians, how many? How many in the last half decade? The vampire of fable was satisfied for a time, at least, with one victim, but this monster turns from the empty veins of its latest conquest to fasten upon those who have given their strength and tenderness to stay a losing fight. If this were inevitable we might be stoics enough

\* Prepared for the Annual Meeting of the Missouri State Medical Association, 1905.

to accept the dire result, but when Pasteur tells us, with "words that can never die," "It is within the power of man to cause all parasitic diseases to disappear from the earth;" when the men of New York and Philadelphia announce that they have in ten years lessened the mortality 40 and 43 per cent.; when other parasitic contagious or communicable diseases have been almost stamped out; when so much is known of the etiology and conditions of transmission in this disease, and that the knowledge is favorable to its unlimited limitation, there is only the need for us to say "the responsibility is ours," and the fight is won.

To the physicians of Missouri I have a proposition to make. It is startling, but practical. I want you to join in a work which will save 120,000 of those now living in our state from death by tuberculosis. It can be done. More than this, it is you and only you who can do it. This is not a sensational statement. Far from it; it is a solemn deduction from plain, easily proven propositions. We cannot avoid it. Our population is over 3,000,000. At present rates at least one-tenth (300,000) will die of tuberculosis. In eastern cities the death rate, by means within our reach, in the last decade, has been limited over 40 per cent. Apply this to our home list, and it means 120,000 lives saved. More than this, each case means two years of suffering and despondency and danger to others. That gives us 240,000 years of this kind replaced by healthy bread-winning, wage-earning years. It means that 120,000 foci of disease will be prevented, and

that not only these will be saved, but those whom they might infect will be protected. It *is* a startling proposition, but it is so true that not one of us can ignore it.

In discussing this question it is usual to present some of the many phases of tuberculosis or its limitations. May I depart from this custom and first speak of what is most important, of that upon which all victory depends—the physician himself? Pardon me if, impressed with the responsibility of the time and audience, I speak plainly, without let or hindrance from conventionality or mistaken kindness. There is no unkindness in plain dealing with honest purpose. Two demands will constantly present themselves to the physician, one originating in his own needs, the other in his patients.

*Something demanded in himself.* We are not as yet masters of the situation, but we must each one grasp the situation with a master hand. Our years of practical training and of knowledge of local conditions are most valuable. There must be a *recognition of the danger*. One case of smallpox in your town will call for action, two will make you very anxious and half a dozen will cause you to summon every resource, therapeutic and preventative, till the disease is stamped out. If we had the same sense of responsibility about tuberculosis—another parasitic, communicable and more insidious disease, there would be little tuberculosis.

*Intelligent study of effective means of limitation* is necessary. Fortunately one does not have to be an expert bacteriologist or pathologist to be an efficient worker here. Our expert

delvers in the laboratory have given us certain definite truths touching the spread and limitation of tuberculosis, and it is ours to make these truths effective. This, I believe, is the key note in the trumpet call now heard throughout the land. It is not so much cure as it is prevention. I would not decry all efforts made to cure the individual, but if we would stamp out the disease it must be by prevention. We will come to this presently.

*Early diagnosis* must be the constant rule. Here is where many of us fail. A cough is treated lightly; loss of flesh is "run down;" fever may be "malarial;" and valuable time is lost where five minutes with the stethoscope and a sputum examination might at the first anticipate grave disease and progressive destruction. It is not for me here to instruct in the methods of physical examination, but I fear not to say that few use their whole knowledge in such investigation. In every suggestive case the evidence should be as thoroughly searched as though the physician were an investigator of titles. Not a fault or a flaw should be overlooked, for even at the best we make mistakes, but the greatest of all mistakes in these cases is carelessness or procrastination.

*Watchfulness.* Another need is that the physician should be ever on his guard. It is not true that tuberculosis is a disease of regular trend, and that it is needless to keep close watch. As well might the fire chief be content to turn on the hose and come back the next day to see results. He will find a ruin, as we will find if we neglect the indications in this greater

consuming. I would here add another need, that of *truthfulness*. Too often we hesitate to state that which we know. It is a mistaken idea that the truth is a handicap to the patient. I have never yet seen it do harm, even when the telling carried little of hope. I would rather have my patient ally than to keep him in the dark, with the possibility each day that he discovers my insincerity.

But these thoughts suggest the picture from another standpoint—that particular point of view where the patient is in the foreground. *Much is demanded by the patient*. This demand may not be voiced in words. It is often the mute appeal that weakness makes to strength, and it is an appeal that must be answered.

In general there is work for the family physician even before there is positive evidence of individual disease. I believe in a pre-tubercular stage, a stage of inherited tendency, of diminished function, of local lesion, even before there is specified invasion. So also I believe in pre-tubercular treatment, in a recognition of inherited tendencies, not inherited tuberculosis. One of the best efforts that the family physician can put forth is the *antagonism of predisposition to disease and faulty development*. Instructing a child in deep breathing, correction of faulty function in assimilation, or wrong physical posture. These may be little things, but they mark the turning point in that child's career, so far as resistance to disease is concerned.

*Hygiene* in the home or school or workshop is to be insisted upon, and who has a better right and is better fitted for this duty than the general



practitioner? May I particularize here? One of the curses of civilization is vitiated air. Air that has been in another man's lung and is loaded with his refuse is not fit for you to breathe. How soon the air in the sleeping room or church or factory will be once used by the occupants is only a matter of mathematical calculation. After that it is second hand and dirty and dangerous. I would place fresh air as the first necessity for healthy function, before food, sleep, drink or anything else. You eat three times a day, drink twice as often and sleep once a day, but you breathe eighteen times a minute, and if your breathing is stopped five minutes you die. Our people are learning this lesson. Consumptives are sleeping out of doors, families are throwing their windows open, and now and then a car has a ventilator open. Windows may be open without fear of danger from draught if a board is placed on edge inside the frame, resting on the sill; a door may be guarded with a safety chain and left partly open at night without danger. Schoolrooms should be visited by the physician, insisting on better ventilation than is usually found. I know of no more potent factor for physical harm than the crowded, overheated modern school-room, where, condemned to hours of inhalation of foul air, the growing child is expected to grind out his allotted task regardless of all hygienic and physical surroundings.

Another general rule that the physician should insist upon and pardon me if I say illustrate, is the *care of the sputum*. People should be taught that careless spitting is dangerous.

We recognize in it the chief factor in the transmission of tuberculosis and we do not know what man may have tubercular foci. I need not here go over the argument. We should urge that if people must spit, that they should spit in a cuspidore, containing some efficient disinfectant or germicide, and that it should never become dry. The consumptive should have a covered cup or equally safe device. There are many of these from the hygienic box to the simple covered cup. These should never be left open, for it is proven that flies may carry the bacilli. A valued friend of mine who has many patients who burn wood, uses a cigar box filled with wood ashes for a sputum cup, when the cover is down it is not unsightly or suggestive and the ashes are changed night and morning. If once the principle is taught, the exact method is but a matter of detail.

I believe it is quite within the physician's province to *instruct in matters of food and clothing*, not only for the sick but for those whom he should guard against sickness. It is not that our people do not eat enough or that the food is not costly enough, but that it is too often illy prepared and poorly cooked, and alas too rapidly eaten. If the demijohn and cigarette have a rival it is the deadly modern frying pan. The same thought applies to much of the clothing that is misapplied now-a-days. Note the thin shoes and thin hose topped by dragging heavy skirt and over the over-burdened chest the vile so-called chest protector and repeated thick-nesses of heavy unsanitary garments, unsanitary and harmful to the last degree. Teach such women the

luxury of good honest foot wear, of well-distributed clothing, of chest freedom and protection of the extremities and it will be better than many bottles of alteratives and expectorants.

In the individual there is a demand for all that has been said and much in addition. When once a diagnosis of tuberculosis has been made there should be a *careful inventory of the patient's vitality and functions*. To bring about normal conditions is the problem and it is necessary to know how much is abnormal and lacking. Before we can proceed to build up we must know how much of what remains is available and how much debris. *Each case must be individualized*. There is no hard and fast rule for the care of tubercular cases. Not even is the amount of local lesion a guide for treatment, for it sometimes happens that patients with slight areas of infection have the least recuperative ability and conversely. In matters of food, medication, exercise and even physical influence the personal equation must be considered.

The general indications, those that may be found in any case must always receive attention. The first and most important thing is to *restore assimilation*. If we could once the diagnosis has been established, forget much of the treatment of symptoms and begin the battle by establishing a valuable source of supply of nutrition and strength we might have more victories. I do not mean over-feeding, nor do I mean saturating the alimentary tract with creosote and its substitutes. Better far is it to clear out the lower bowel with an occasional enema I have elsewhere spoken of the value of

the normal salt enema, which I believe of value. If there is a tendency to incomplete emptying an occasional saline will do no harm. There is no use of a adding fuel to a grate full of cinders. The food should be well selected for the individual case. Much sameness should be avoided, but good meat not overdone, milk and eggs are standard. Have the patient eat slowly and masticate well. Where gastric function is impaired, little water should be taken with the meal, and the milk should be sipped slowly. Frequent feeding rather than over feeding is generally best. In addition to proper diet some gain in nutrition may be made by dailyunctions with coca butter. The massage if not too forcible is often valuable. The dietetics and hygiene of tuberculosis are so important that I regret I can but mention them here.

The *conserving and increasing of strength* is a matter of discussion. As a rule I do not believe in much exercise for the consumptive. He should not overdraw his bank account of vitality. To stop when tired is the golden rule in such cases. Often deep breathing and a little gentle chest exercise is the limit. What causes too rapid heart action, too frequent respiration or exhausts the patient in any is harmful.

*Specific Medication*.—There is no antidote to tuberculosis as yet found. After a somewhat long and varied experience with the *serum* of different laboratories and with tuberculin in its varied forms I have reached the conclusion from the history of my own cases that however helpful this line of treatment may be from a physical point of view, there is little sub-



stantial to warrant confidence in it. I believe all experiment in this direction is valuable and promises much. So far the promise has not been made good, yet I believe that we are nearer its realization than ever.

Special therapeutics in tuberculosis is a subject not to be neglected. While I do not believe in much medication, there are urgent and important conditions that must be met quickly and effectively. One of these is *hemorrhage*. Sometimes hemorrhage from the lung, if it be slight, seems to give temporary relief, but this is not the rule. Almost instinctively we seek to stop it, and it is an urgent symptom for which we have no adequate medicinal remedy. I have lost faith in all drugs from common salt to ergot, and in our work at Mount St. Rose we have had ample opportunity for watching their effect. The condition to be desired in hemoptysis is rest, mental and physical rest. Hypothetical propositions founded on theories of contracting small vessels or dilating larger ones, or of slowing or reducing heart action do not work out. Hemorrhage may cease after such treatment, but not on account of it. Better far than drugs is compression, putting the lung in a splint. A good sized towel should be rolled into a cylinder six or seven inches long and as thick as the wrist. Let this be applied over the lobe of the lung from which the hemorrhage comes, and a wide bandage over it tightly drawn and pinned in place. If this is properly placed it is more effective than drugs. At the same time a little opium may be given to relieve restlessness. The patient should remain in bed in an easy, com-

fortable position till all danger of immediate recurrence has passed.

*Cough* is one of the most troublesome complications. Except in the last stages it is not well to give opiates, and unfortunately there is no sedative that is effective and harmless. The old-fashioned chloral and bromide mixture is valuable at night, and if the cough is from bronchial irritation, iodide of potassium, with or without muriate of ammonia in solution, sometimes does well. It should be remembered that oftentimes the cough is due to laryngeal or pharyngeal irritation. In such cases a sedative spray, an astringent application or the inhalation of a little of the old "A. C. E." mixture will sometimes help. Patients should be taught how to cough, or rather how to expel the sputum. The loud, harsh, distressing cough is generally unnecessary and harmful. Let the patient inspire slowly till he gets the largest amount of air below the irritating accumulation, then a forced expulsion will often expel the sputum and give relief.

*Fever* is one of the most obstinate complications. Resulting from double infection, it does not yield to the antipiretics of the pharmacopia, nor has the antistreptococcus serum been a success in our hands. Rest in bed and sponging with cool water helps, and the repeated eyemata before referred to are aids.

*Night sweats* are often troublesome. The control is largely a matter of individual experimentation. We have not found any of the vaunted remedies worth much. Due as a rule to the relaxation of the vaso-motor filaments, after a sound sleep, atropia is valu-



able, but a little strategy is sometimes effective. If the sweat comes on regularly, let the patient be awakened by an attendant or an alarm clock half an hour previous and be given an ounce or more of good whiskey. Sometimes the wakening alone is sufficient, but a stimulant at the time is generally indicated. Care should be taken that the patient does not sleep under too heavy covering or in a poorly ventilated room.

*Climate.*—Fortunately for the consumptive the cry of “change of climate” is dying out. The discomforts and dangers of so-called resorts for tuberculosis are being exchanged for the comforts and healthful surroundings of the modern home life under hygienic conditions. It is fast becoming a truism that the consumptive must get well in the climate in which he expects to live, and that he can get well in any climate is a proven fact. One word as to our own state. It has been the habit to disloyally decry our home climate, when there probably is no climate in christendom that has a better average of good and healthful days. More than this, the number of deaths per thousand from tuberculosis in Missouri is somewhat less than the average rate in the United States. If a patient is sent away let there be some definite, positive reason for his going, pertinent to his case. By all means forbid patients far advanced, or febrile cases, or cases dependent upon home and home society, to seek betterment in some far off vaunted utopia where the allurements are seductive but false. The home climate is the best climate for the consumptive, and the ordinary variations in heat and humidity are

of little if any importance. As a proof of this the very best results are being obtained in Boston, New York and Philadelphia, where the theromeric and barometric changes are greater than ours.

*Organization.*—As before mentioned it is by prevention that the disease must be met. Our great hospitals and sanatoria are not more useful for the care of the sick than for the education of the well. The limitation is largely a matter of enlightenment. “Doctor” means “teacher,” and here again the general practitioner finds a field of profitable work. There should be a leader in each town in Missouri who will gather around him a few intelligent citizens, tell them the a b c of the danger and the methods of prevention and put practical ideas into working shape. The work in large cities is a little different but may serve as an illustration. In St. Louis, for instance, we have an association which is in touch with all the great charity organizations and is an integral part of the Civic League. Its work so far has been the advocacy of bills enabling the health department to register cases, inspect premises, and disinfect apartments. It has also issued and distributed 250,000 leaflets and cards for the street cars, factories and dispensaries. It has a staff of lecturers ready to answer calls for instruction from different societies, lodges and associations. A corps of inspectors from the different charity organizations will co-operate with our committee on inspection. Another feature of our work is to teach people the value of fresh air and well ventilated sleeping and work rooms. One consequence of this

thought being constantly repeated is that our street cars now have ventilators that ventilate, and the spitting crime is being rapidly lessened.

No appeal is complete without an application. What is our personal obligation and our personal responsibility in this matter? There is not a physician in this room who is not an important factor in this fight. Make it your fight. We will all have to be more out-spoken than heretofore. It is hard sometimes. Not long ago it was my painful duty to reprove a physician who wore the badge of the American Medical Association for copious and disgusting spitting in the great Philadelphia station, although a police warning was hanging over his head. Fortunately such cases are rare. We should first of all be examples in all that pertains to the laws of limitation, then we are ready to advocate organization. I would suggest, as the profession is being so efficiently organized in our state, that each county society have a special committee on tuberculosis, that the committee urge upon the members to send statistics of number, stage and general surroundings of the cases of tuberculosis known to them, and that the aggregated reports be sent to a committee designated by the State Association. I would further suggest that leaflets bearing upon this subject be distributed through these local committees in a way most suitable. The National Association will be glad to be consulted with regard to such literature, or our St. Louis society will furnish samples of the cards and leaflets most practical. In St. Louis we owe much to the daily

press, the editors of our dailies being a large part of our Committee on Publicity. So in each town the local press will aid in diffusing the literature approved by the local committee. Lectures can also be arranged for and in a dozen different ways the educational feature of the crusade be advanced.

*A Word of Caution.*—There is danger that in the war against tuberculosis the public may become too zealous, and great wrong be done the unfortunate sick. The victim of tuberculosis is not a criminal, nor is he indeed a very dangerous member of society, provided proper care be taken to prevent his communicating the disease. There is no need that he be ostracised. The best place for the majority of cases is home, or the home-like sanatorium, and in the effort to protect the home the consumptive need not be rendered homeless nor a mark be put upon him as a modern Cain, ignoring responsibility as his brothers keeper. With a better knowledge of the principle of limitation the consumptive in the early stages does not endanger others in the home, the workshop or the store, and in the latter stages he can be cared for without danger to the attendants.

My final word is one of congratulation. The recent appropriation for a State Sanatorium is an evidence of the intelligent interest taken by our representatives. The secretary of the American Medical Association a few evenings ago publicly made a flattering reference to the work done in Missouri as compared with that of other states. With the judicious expenditure of the \$50,000 given by the

last legislature more will be forthcoming, and what is of more value educational results will be obtained that will be effective in every home. It is this thought that should be uppermost. Almost the last public words of Dr. Hodgen were "more light." It is this that makes all legislative, all sanatorium study most valuable. If there is one thing that has made the work at Mount St. Rose effective, it has not been so much the care of the 500 patients committed to its care, but the opportunity given to teach the patients and the friends of the patients methods for limitation and prevention of consumption.

The problem is being solved and its answer means the saving of 120,000 citizens to Missouri. The key to the problem is organization and education.

3886 Washington ave.

#### DISCUSSION.

Dr. J. R. Lemen, St. Louis: I enjoyed Dr. Porter's paper very much. There is one thing that possibly we may lay too much stress upon, or, perhaps, I should put it this way: That it is a fact that in many cases which you and I and every other physician sees we may wait for a microscopic examination before pronouncing it tuberculosis. I don't wish to deery the microscope, but I want you to think of the microscope when it shows the germs as being confirmatory evidence of other symptoms and signs we have found before. The patients come to us frequently in the early stages, before they are expectorating bacilli, and they will merely say that they have a cough, and have been losing flesh, and that they don't feel

up to par. Examine that patient closely; have the temperature taken three times a day, at 8 A. M. at 1 and at 6 P. M., and you will find there is a rise in the temperature of a half degree to a degree and a half. You may not call it fever but it is a rise in temperature. The books speak of afebrile cases of tuberculosis. I never saw one, and don't believe any one in this room ever saw a case of afebrile tuberculosis. When the patient is losing flesh, and coughs, and has an elevation of temperature, don't wait for the evidence of the microscope before you begin your treatment.

Dr. J. D. Brummall, Salisbury: As to early diagnosis, I have observed the fact that rapid pulse is one of the earliest symptoms. A little tincture of strophanthus does much to relieve the patients and aid them in getting well.

Dr. J. A. Larrabee, Barnard: One of the things I have been instructed to do was to tell the truth, but the paper don't tell us just what to tell these patients. Suppose you tell them: You have tuberculosis; you must eat good beefsteak; eat eggs, and breathe fresh air. What will be the result? I have no statistics as to just what they will do. I never went quite that far with but one patient, who went to another physician, who made \$100 before that patient died. I do believe that our effort should be to assist the patient in his fight against the disease. I believe there are supporting measures, and I believe the doctors from the city should tell us what they do as well as what should not be done.

Dr. Porter, in closing: Some points in the paper, I think, have been mis-



understood. I do not for a moment believe that the diagnosis should be based only on the microscopic findings. I saw recently, with Surgeon Major Bannister, of the army, a man dying of tuberculosis, although no one had ever been able to find the bacillus in his sputum. Dr. Moore certainly did not mean to cast any reflection on the importance of the necessity for some means of preventing the danger of the dissemination of the sputum. It should not be allowed to fall on the carpet or sidewalk or any other place where it cannot be destroyed. At Mount St. Rose it is expulsion for a patient to spit elsewhere than in the cuspidor. It is your duty

to take up this work of limitation in your own homes. In your hamlet or town see that you become the leaders. With the encouragement that has come to us from the large cities in the east the work need not be so hard. "What shall we tell the patient?" It reminds me of the reply of a certain Democratic leader who was asked, with reference to certain facts in his history, "What shall we tell the people?" He replied: "Tell them the truth." Be frank with your patient, and you will keep that patient and his confidence, and you will have the inward satisfaction of knowing you have been honest in your dealings with him.

## RECENT ADVANCES IN THE ETIOLOGY AND TREATMENT OF HAY-FEVER.

BY HANAU W. LOEB, M. D., St. Louis, Mo.

For almost a hundred years, since Bostock called attention to the disease which is now known as hay-fever, its etiology has been the subject of much discussion. For the greater portion of this time it has been a discussion of theories rather than of experiments. More lately, since the intelligent observation of cases has been counted of more value than the spinning of hypotheses, a clearer view has become possible. Among the many agents which have been suggested as possessing a causal influence upon hay-fever the following may be mentioned:

*Heat.*—Bostock and Phoebus held the heat of summer responsible for the disease.

*Bacteria.*—Helmholtz was among the first to ascribe to bacteria this

role in hay-fever, a view which has been more or less held up to the present, but without proof. For instance, Heymann and Matzuchita, thinking perhaps that pollen furnished the means of bacterial invasion, made investigation along this line which convinced them that this could not be true. (*Zeit. fuer Hyg.*, Vol. 38, p. 495.)

Weil found in twenty-six cases a coccus which was not found in eleven controls (not affected by hay-fever), and not found in the bacterial flora of the nose. It resembled the micrococcus liquefaciens conjunctivæ, and was not pathogenic for mice and guinea pigs. However, this coccus did not produce hay-fever in the predisposed individual. Weil's answer to this was that pollen could likewise

not cause hay-fever in such an individual.

Axillos found in thirty-five asthmatics a micrococcus on the mucosa which he could demonstrate in patients, and which he considered as operating by means of the toxins on the sensory nerves.

Many others have pursued investigations along these lines, feeling sure that bacteria had an important bearing upon the etiology of hay-fever. The periodicity and the widespread invasion of certain communities naturally directed observers toward bacteria, wherefore many painstaking bacteriologic studies have been without result.

*Pollen.*—For many years, since Elliotson first showed by experiments that emanations from grasses and hay could produce the disease, and particularly since Blackley substantiated the influence of plant pollen in the etiology of this disease, the pollen of certain plants has been ascribed as the cause. In 1898 Blackley showed that the pollen grains of seventy-six different plants could cause hay-fever. Mackenzie, on the other hand, maintained that the great interference in the way of a proper understanding of hay-fever was this very pollen theory.

Thost believed that the action of pollen is either mechanical or chemical, and that the odorous particles, and not micro-organisms, were the cause. He examined 350 patients and found that vegetation, local disposition seated in the mucosa of the upper respiratory tract, and an idiosyncrasy played an important part in the etiology of the affection.

Luhe held that, under the influence of nasal secretions, the pollen cover-

ing was so modified that the special ethereal oil of the plant was set free, and this Fink thought operated on the trigeminus.

Although these and other observers conducted extensive observations upon the relation of pollen to hay fever, Dunbar was the first to undertake a logical investigation of its etiology from the standpoint of proper experiment. He undertook to produce hay fever in susceptible individuals at a time when the disease was not prevalent. By the use of certain pollen grains he succeeded in producing hay fever in these individuals, demonstrating a causal relation between these pollen grains and hay fever. His control experiments showed that the pollen was without effect on a non-susceptible individual during the hay fever season or during the intervals. After showing the influence of pollen upon this experimental hay fever, he next undertook to determine what part of the pollen was responsible for the disease. After a series of very interesting experiments, based upon chemical and physiologic grounds, he succeeded in extracting a substance from the pollen grains which had the same effect as the pollen in producing hay fever in susceptible individuals during the usual intervals of the attack. In this way, by successive experiments and logical deductions, he established that the specific cause of hay fever is the toxin or toxalbumin which is found in the pollen grains of certain plants.

There is a marked difference between the German hay fever, which usually appears in May or June, and the American hay fever, which attacks



its victims about August 10th. Dunbar finds that in the former case the condition results from the pollen of the grass family, particularly rye, while the American hay fever is due to the pollen of the rag-weed and goldenrod in the main. These experiments and deductions are rendered all the more conclusive when considered in the light of the annual hay-fever attacks. In Germany the grasses are in flower just as the so-called *Rosensieber* or German hay fever appears, while in America the flowering of the goldenrod and rag-weed is the signal for the appearance of hay-fever paroxysms throughout their habitat.

Dunbar also established that when a susceptible individual approached a field where these toxic pollen grasses were abundant, hay-fever paroxysms invariably resulted, and that during the season the paroxysms were heightened in this way.

Quite extensive investigations have been made to determine the toxicity of these pollen grains in so far as susceptible individuals are concerned, and a large number of plants have been given their proper position in this regard. There seems to be no relation between the poisonous qualities of certain well-known plants and their influence on hay-fever, while certain grasses are innocuous in other respects, even if they do produce a form of hay-fever. Thus, for instance, the hemlock, mockorange, poppy, aconite and digitalis plants and common nettle have all been found non-toxic for hay-fever, while in addition to the grasses, the aster, chrysanthemum, daisy, lily-of-the-valley and spinach have been found toxic.

Having established the cause of

hay-fever, Dunbar proceeded to seek for the remedy. The resemblance of the pollen toxin to the bacterial toxin led him to attempt to secure an antitoxin by immunization. After much painstaking effort and many disappointments he finally succeeded in obtaining an antitoxin which fulfilled the conditions desired in experimental hay-fever; in other words, the use of the antitoxin simultaneously with the toxin in susceptible individuals was without reaction, while the controls reacted as usual. The antitoxin would cut short an attack of hay-fever which had been artificially produced.

When these experiments were subjected to the clinical test the results were altogether confirmatory. This does not signify that every case of hay-fever can be cured with the antitoxin whether used in a proper or improper way, any more than that the diphtheria toxin is effective under any and all circumstances.

In the writer's hands it has been found subject to the same diversity of conditions that other remedies manifest whether specific or not. While practically every case was improved, the benefit was only in proportion to its intelligent use. Cases must be considered from their individual characteristics, the dosage must be determined for each individual, the habits of the patient taken into account, abnormalities of the nose considered and the patient brought into proper conditions of life. In our June fever, which is a form of hay-fever akin to the German hay-fever, the remedy is startlingly effective, while in the American hay-fever it is less markedly so, and the serum



prepared by immunization against goldenrod and rag-weed pollen toxin is more satisfactory. These facts have been elicited by observation of a number of cases. In one case, that of a woman affected for a year and a half with rose-fever almost uninterruptedly from the time she was first affected in May, 1902, the relief was almost immediate. She has spells of sneezing, even asthma from time to time, but only when she was affected by an acute coryza which called for the usual treatment of the acute coryza. This led me to suggest that we must recognize that hay-fever patients may be subject to any of the nasal affections and that such patients will be very prone to symptoms such as we find in hay-fever, sneezing, obstruction and discharge. Whereas it is nearly certain that such symptoms, resulting from hay-fever poison, may be relieved, it is likewise true that, where they result from some other cause, no amelioration can be expected by the hay-fever serum.

Another case of rose-fever, affected for three months, consulted me on August 2, 1904. I found that there was present hypertrophic rhinitis with large posterior hypertrophies and I advised the use of the hay-fever serum, and stated to the patient that after the hay-fever season I would operate on the hypertrophies. In two

days the relief was so great that I was prevailed upon to operate, in spite of the fact that at that time we were in the midst of the hay-fever season. Up to the present time she has had no further evidence of the hay-fever.

I found that most patients were prone to use too large an amount at each dose. A smaller quantity is more effective and less irritating. Some patients feeling secure in having a remedy undertook certain pursuits which increased the hay-fever, such as riding in railway trains with the windows open, playing golf, going to country districts where the goldenrod and rag-weed were more abundant than where they had been. Finding the hay-fever serum not altogether effective under these conditions, they discontinued it. However, when they were directed to refrain from such pursuits and the serum antitoxin given to them in a proper way, the relief was complete.

In all cases it is necessary to consider the local status of the nose. Spurs, ridges, polypi and hypertrophies must be removed, deflections corrected and the nose made as nearly normal as possible. It is only by doing this, that we can hope to make efficient application of the remedy under the most favorable conditions and thereby achieve the best results.

## REPORT ON MEDICAL EDUCATION\*.

By C. M. JACKSON, M. D., Columbia, Missouri.

Although there are many important questions concerning medical education which might profitably be discussed at this time, it was thought best to limit the report to a single phase of the problem. The question presented for your consideration today is that of electives in the medical curriculum.

This is a comparatively new idea in medical education, but it is a question of fundamental importance. We shall have to consider first whether it is practicable to admit electives into the medical curriculum, and, second, whether electives are desirable in medical education.

In the first place we have to consider whether it is possible to find room for electives. Is not the curriculum now overcrowded? Let us see. It is already impossible to require the medical student to learn *everything* of importance in medicine. He cannot do that in four years, nor in ten years, nor even in a lifetime. It is, therefore, manifestly necessary that out of the vast stock of knowledge included under the various medical sciences a selection must be made of those portions considered most useful as a foundation, preparatory to the practice of medicine.

But what is the best selection? That medical faculties are unable to agree upon this point is very evident when one compares the courses of study in the various medical schools in the country. All will agree that a

thorough laboratory training in the fundamental sciences, anatomy, physiology and pathology, is indispensable. All will likewise agree that a thorough knowledge, both theoretical and practical, of medicine, surgery and various other clinical subjects must be required. But the amount of time which should be devoted to each of these subjects, and the number of special subjects which should be included, are questions still open for discussion.

If, therefore, it is thought desirable to make room for electives, it would seem possible to do so. A large proportion of the time available must necessarily of course be restricted to required work in specified subjects, both general and special, but a small portion of the time might be reserved for electives to be chosen by the student under certain restrictions. This plan has already been adopted in several medical schools in this country, and so far as I know has worked very well. If the time now required for the medical course should prove insufficient to allow the elective system to be properly carried out, more time could be provided in various ways—*e. g.*, more work could be required for entrance, the term increased in length, or even if necessary, the course increased from four to five years. We may conclude, therefore, that the principle of electives is *practicable*, and proceed to consider whether it is *desirable*.

The great argument in favor of the principle of electives in medical education is that it replaces the time-

\* Read at the forty-eighth annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

honored rigid curriculum with a course of study which may be modified to suit the varying needs of individual cases. As an extreme instance of what might possibly be accomplished by an extension of this principle, I will mention the establishment of dentistry as (what it rightly should be) a special branch of the medical profession. Nobody, and least of all the dentists, would deny that a knowledge of the general principles of medicine and surgery would be a great advantage to the practitioner of dentistry. On the other hand, the dentist might properly object to spending much time on special subjects, such as ophthalmology or dermatology, which would be of no direct benefit to him in practice.

Why not recognize this principle, require of the dental student (aside from the necessary preliminary medical sciences) only a minimum of required work in medicine and surgery, allow him to take *as electives* the special work now required in dentistry, and at the end of four years give him his M. D. in dentistry? It seems to me unquestionable that some such plan would elevate the dental profession and be a source of additional strength to the medical profession.

But if the principle of electives be conceded as useful in the case of dentists, it is hard to see why the same principle should not apply to other special lines of medical practice. We are tending more and more to specialization in medicine. This tendency is an unavoidable result of the present rapid progress in all branches of medical science. Day by day it becomes increasingly difficult for the general practitioner to keep abreast of the

times in all lines of practice. It is not likely that the general practitioner will ever be driven from the profession, but it does seem inevitable that his field will continue to become narrower, and that of the specialist will become correspondingly wider. Whether we like it or not, this is a tendency we all must admit. It is the great economic law of the division of labor working irresistably in the field of medicine.

I would not be misunderstood as wishing to educate all medical students as specialists, however. And in any event the education of the specialist will necessarily be almost entirely a matter of postgraduate work. But the elective system is equally valuable for the student who desires to become a general practitioner. From the report of the National Confederation of Medical Examining and Licensing Boards (*Journal A. M. A.*, August 15, 1903), it appears that in forty-three of the leading medical colleges in the United States an average of about two-thirds of the time required for clinical subjects is devoted to the general branches (medicine, surgery, obstetrics), and nearly one-third to the remaining more specialized branches. If, instead of a rigidly required course, we should, for example, specify required work in the general clinical subjects to the extent of three-fifths of the time available, and in the various special subjects for one-fifth, there would still remain one-fifth of the time, which might be elected according to the varying needs of the individual student. The prospective specialist might apply it to advantage by spending more time in the specialties of his



choice; the prospective general practitioner would be free to spend it in more general work, if he so desired. An elastic system is therefore better for all students, since it allows a modification of the course to suit the varying individual needs.

If we admit this principle, even to a limited extent, it follows that a certain amount of electives, especially in the latter part of the medical course, is desirable. Under this system, besides the more general courses, each chair in the medical school should offer additional more specialized courses as electives to those who wish to devote more time to these particular subjects. Having completed the minimum amount of required work in the various branches, both general and special, the student could then devote the remainder of his time to that line or those lines in which he wished to become especially proficient.

The principle of electives has, of course, its limitations, but I believe that with proper restrictions it will prove to be a step forward in medical education.

But aside from the possibilities of electives for the purposes already indicated, there is another use to which they may be put, viz., to provide opportunity for research work by the student. Now I must state at the outset that I am an enthusiastic advocate of research work in medical education. I am, of course, aware that there has been, and still exists, a wide-spread tendency to decry research work as of little practical value. But this tendency is, I believe, largely due to a misunderstanding of the true aims, methods and results of legitimate research work. When these are fairly

understood, I am confident that the medical profession will commend this policy without hesitation. Many of you doubtless understand the term research work to mean the working out and publication, at a great expense of time and money, of some obscure point of no practical value. This is most emphatically *not* the kind of research work that I advocate. You will pardon me, therefore, if I take time to explain my position on this subject in some detail.

Medical science, in a wide sense, is that subdivision of biological science which deals with the human organism in health and disease. A knowledge of what may be termed "medical" phenomena (like that of science in general) may be gained in various ways, which may be conveniently classified under three methods; the objective, the literary and the didactic methods. Briefly expressed, by the objective method is meant the gaining of knowledge by direct observation of the phenomena concerned; by the literary method is meant the study of the phenomena at second hand through observations made by others, and recorded as such in the medical literature; and, finally, by the didactic method, the facts are learned through the teacher or textbook (representing a systematic compilation of facts, usually at third hand.)

While all these methods have their place and value in medical education, the tendency in recent times is to emphasize more and more the first or objective method as of foremost and fundamental importance. The immense improvement in laboratories and clinics is a direct outgrowth of

this idea. The underlying principle is that in order to get a firm foundation, it is necessary for the student to get back to nature and *learn the facts for himself at first hand.*

These principles are so well established, and have been reiterated so often, that they seem self-evident. The fact that I wish to point out in this connection, however, is that *these methods and their applications are identical in principle with those used in original investigation or research work.* Every scientific investigator in fact, uses all three methods mentioned, and in much the same way as should the medical student. The investigator, as a rule, has derived his general ideas from teachers and text-books. Next he consults the literature containing the records of observations made by previous investigators upon a given topic. Finally the most essential part of his work consists in going back directly to the phenomena themselves, studying and testing them in various ways, and drawing his own conclusions. Now if this sort of work is sufficiently extensive and formal, and if the results are sufficiently valuable to warrant the expense of publication, we dignify it with the title of research work.

But does this research work differ essentially (except in degree) from the kind of work that every medical student should be doing all the time? It can hardly be said that it does? I will even go farther and say that every successful practitioner, whether he realizes it or not, is and must be an original investigator. Every case he meets is essentially a research problem. And the more carefully, thoroughly and syste-

matically the practitioner applies the methods of scientific research to his practice, the more successful will be his results. Research work is, therefore, doubly advantageous to the medical student, since he thereby not only gains his foundation knowledge in the best possible way, but also gets a training in methods which are of direct practical benefit in his subsequent professional practice.

What might be called the research idea, therefore, is already recognized (though not under that name) as a fundamental principle in modern medical education, and the best laboratory and clinical instruction is (consciously or unconsciously) planned in accordance. A formal recognition of this idea, however, would help to clear the air of much misapprehension concerning the nature of research work, and its practical bearings and relation to medical teaching and practice.

Aside from the research spirit which should pervade the ordinary class work of the medical student, however, the question naturally arises as to whether it is possible to extend the idea by providing for individual research work in the medical curriculum. This can be easily done under the elective system in the following manner: In connection with each chair in the medical school, besides the usual didactic, clinical or laboratory courses, a research course should be offered as an elective open to students who have taken sufficient preliminary work in that line. The nature of that work would naturally vary according to the talent and inclinations of the individual student and teacher, the materials available, etc. It might be



advisable to *require* each student to do something along this line, and to write up his work in the form of a graduation thesis (such as is now required in European schools.)

The work should be planned, however, not primarily for purposes of publication, but for the *training of the student in research methods*. Introductory research work of this kind would necessarily be simple in character, perhaps merely the verification of some work already published. It is the *method*, not the materials or the results, that is of primary importance at this time.

The emphasis placed upon the method as the most important thing to be considered in research work by the undergraduate student, however, should not preclude the encouragement of more formal research work, the results of which are worthy of publication. Considering that the vast body of knowledge handed down to us from former generations is a small matter compared with what still remains to be discovered, we should certainly be unworthy if we wait for these discoveries to be made by chance, by individual enterprise, or by a few favored institutions. On the contrary it should be the duty of every medical college, not merely to teach what is known, but to make systematic provision for the discovery of the unknown. I believe, however, that the plan outlined above would work out to advantage in this respect also. An undergraduate medical student, it is true, will rarely be able to turn out results worth publication. But, with the proper training acquired in his un-

dergraduate course, the post-graduate and practitioner would be able to contribute largely to the amount of productive scholarship. In the medical colleges themselves, moreover, much could be done if research work were more encouraged and the proper clinical, laboratory and library facilities were provided.

The need for abundant clinical and laboratory facilities in medical colleges is everywhere recognized, and is already met in the better class of schools. The need for library facilities, however, is not yet fully understood and appreciated, few schools being adequately equipped in this respect. Complete sets of the principal journals representing the various laboratory and clinical sciences should be accessible in every medical school. They are valuable for the ordinary class work, but indispensable for research. If library facilities were provided, and research work systematically encouraged in the medical schools, I believe that it would result in vast improvement and rapid progress from every point of view.

In conclusion, therefore, this report may be summarized as favoring the adoption of a limited elective system in medical education; first, because it would provide an opportunity for the medical student, whether a prospective specialist or general practitioner, to select a course better adapted to his individual needs, and, second, because it would give him an opportunity to familiarize himself with the practical methods of scientific research work in medicine.



## A CASE OF INDIGENOUS TUBERCULAR LEPROSY.\*

BY JOSEPH GRINDON, M. D., St. Louis.

*Family History.*—Patient's father was born in New Orleans, of German parentage, and is said to have died of consumption. Patient's mother was born in Louisville, Kentucky, and died of typhoid fever. There were seven children in the family, of whom five survive, a boy and a girl having died in infancy. The living children consist of the patient and four sisters, two older than he, and two younger. All four are said to be in excellent health. They reside in New Orleans. The oldest is married.

*Anamnesis.*—Patient, H. S., male, aged sixteen, was born in St. Louis, and removed to New Orleans with his parents when two years old, where he continued to live until two and a half years ago, since when he has spent his summers in St. Louis, being employed as stable-boy for a string of race-horses, and living in the winter at Dallas, Texas. Last winter he was some time at Hot Springs, Arkansas. This month (May, 1905) he returned to New Orleans, where he now is. He lived, ate and slept about the stables, occupying a bed by himself, but coming in frequent contact with the other stable-boys through the day. He has consulted physicians at various times, who called his case "eczema," "a blood-rash," etc. He was finally seen by Dr. H. M. Pierce, who referred the case to me.

I am informed that a photograph, taken four years ago, shows nothing abnormal. A few months later there appeared dryness and roughness of

the palms and soles, followed by deep fissures, which often bled. Soon after the skin of the face began to thicken and grew scaly. Last January, while at Hot Springs, he suddenly grew worse, the infiltrations about the face greatly increased, and lesions appeared on the general body surface. Patient states that he has at no time had fever or incapacitating illness, but for some years has had constant nasal catarrh. Four or five years ago had pain in both ears with discharge of pus, followed by deafness. The ear symptoms have since disappeared.

*Present Condition.*—Patient is a blonde, a little undersized and underweight. He has had a hard life, and seems fully up to the average in intelligence. There is a badly healed fracture of the third left metacarpal bone.

One is forcibly struck at the first glance by the senile look of the face, which might pass for that of a man of sixty instead of that of a boy of sixteen. The brows, nose and lips are greatly coarsened and thickened, thus deepening the furrows and creases of the integument, and constituting a fully developed leontiasis. The characteristic thickening of the lobe of the ear and of the tragus is especially well marked on the right side. The whole face is of a yellow tint, and is slightly scaly. The hair is thin, but there are no bald spots. The eyes seem unaffected. There are no mouth or throat lesions. The voice is not raucous.

The greater part of the thorax and

\* Read before the St. Louis Medical Society, June 3, 1905.

limbs is covered with dark-brown, scaly lesions, closely crowded, in places comparatively superficial and elsewhere forming large, deep, tubercular masses. At the upper extremities the involvement begins over the shoulders and extends to the wrists, except that a band of comparatively free skin begins on the inner aspect of each arm, at the axilla, whence it extends forwards and outwards to the

men. These fade gradually into the intervening normal skin. There is no leucoderma.

The back shows scaly areas below the scapulæ. Elsewhere extends a brown pigmentation, except that a broad, ill-defined band of nearly normal color extends down the spine.

A line at the level of the top of the sacrum and anteriorly passing downwards parallel to and a little below



FIG. 1.

bend of the elbow, thence down the middle line of the anterior aspect of the forearm to the wrist. The hands present some firm œdema, while the skin over the fingers is somewhat glossy and atrophied. The skin of the palms is thickened, furrowed and fissured.

The anterior surface of the trunk presents symmetrically disposed areas of brown pigmentation, passing over the pectorals from the shoulders, and becoming more diffuse over the abdo-

Poupart's ligament on each side marks the upper boundary of an area of dense infiltration, extending to the feet. The lesions form a continuous sheet, marked at points with deeper and larger masses of leproma. The surface is scaly, which feature becomes more marked as one passes downward. Over the entire surface the distribution is markedly symmetrical. There are no ulcers nor mutilations. There is massive enlargement of the saphenous lymphatic



FIG. 2.



bodies. Cervical and inguinal adenopathy is less marked.

Enlargement of nerve trunks cannot be made out.

There is no pain, itching nor other subjective symptom. Pain sense and tactile sense are absent over a small area over the lower fourth of the anterior surface of each forearm, extending symmetrically a little higher toward the radial than toward the ulnar border. There are small anæsthetic areas symmetrically disposed over the posterior aspects of the thighs and legs, but at these regions as everywhere else the temperature sense seems unaffected. The anæsthesia, sharply limited to small areas, seems to be rather metameric than to correspond to cutaneous nerve areas. To be exact, this case is a mixed one, but the skin lesions so greatly overshadow the nerve symptoms as to entitle it to the term tubercular leprosy.

It has been well said that most cases of leprosy are mixed, but we can often speak of them as tubercular on the one hand or anæsthetic on the other, as one type overshadows the other. I have thought it might not be amiss to say a few words about the distribution and prevalence of leprosy in the United States.

Leprosy has been known from very high antiquity. We know how common it was throughout the Middle Ages in France, Germany, Scotland and Scandinavia. In modern times, about the time syphilis began to appear in Europe, leprosy disappeared, or was supposed to have disappeared, so that in modern times it was only known to exist in Scandinavia and Iceland. There is a general impression that there has been a recrudescence of

leprosy in recent times, but perhaps many cases formerly failed of being diagnosticated, so that the increase may be more apparent than real. Here in the United States it is only recently (since 1866) that we have become apprised of the fact that there are a number of cases in the country. The first in time came to New Orleans from Acadie as early as 150 years ago. Other points of invasion are on the Atlantic coast in small settlements where the disease was brought from the West Indies and perhaps by the slave ships from Africa. It also exists in Scandinavian settlements in Minnesota and Wisconsin, and recently has been discovered in North and South Dakota. There is a district in Southern Florida where it is found. A fourth source is the Chinese element in California, the fifth source is through the Hawaiians who have come to this country, and the sixth are the cases that overflow from Mexico. So on the north, south, east and west we have these leper settlements, and right in the interior of the country, the Scandinavians. The New Orleans contingent largely interests us. We all remember the beautiful story of Evangeline, and how the Acadian settlers were transported forcibly in 1758. With them they brought leprosy, and it is among them today. In their neighborhood people of other birth have developed the disease. For a time the number of these cases diminished and they seemed to assume a milder type, so that the existence of the disease in the South was for a long time forgotten. But in 1866 the attention of the medical profession was drawn to the matter and finally

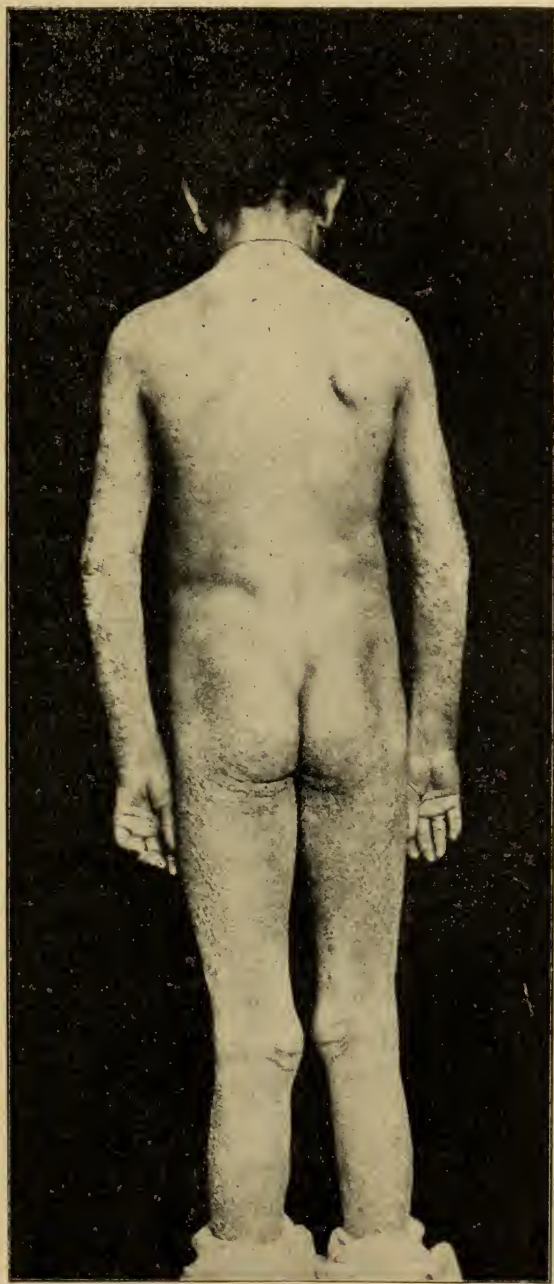


FIG. 3.

that of the State of Louisiana. A lazaretto was established in 1885. The number of cases from that time has varied. In 1902 the United States Marine Hospital Commission made a report on the subject to the Senate. In this report the cases in Louisiana are stated to be 155 and those in Florida twenty-four. Both these figures and others reported as the result of government investigation, I believe fall far below the reality. In South Carolina there has existed for many years a settlement not far from Charleston. There were formerly sixteen cases, but now only four are left alive. There have been reported from New York altogether 100 cases of leprosy. There is no settlement there, but cases turn up from time to time from all over the world. The disease has existed in the Scandinavian settlements for years. Emigrants brought the disease with them to this country. In New Scandinavia, including parts of Wisconsin and Minnesota, there are thought to be about 160 cases of Scandinavian leprosy. It was once said that no new cases developed there, but new cases have been shown. Only in 1901 a child was born in Minnesota of Scandinavian parents in whose family there was no history of leprosy, but this child developed the disease.

In San Francisco alone there are 25,000 Chinese, and amongst them are many cases of leprosy, as also elsewhere on the Pacific coast. There are in Salt Lake City a number of Hawaiians who have been proselyted by the Mormons and some have brought leprosy with them. In San Antonio there have been cases brought from Mexico. In Nova Scotia and

New Brunswick there have been settlements for a long time. In British Columbia there is also a settlement. In Mexico there is but little attempt on the part of the government to control the disease. Segregation is not enforced by law and patients come and go as they like. In Cuba there is a leper hospital and the patients formerly came and went as they pleased. American intelligence, brains and foresight attacked that problem just as they did the yellow fever problem. In Porto Rico there is a good deal of leprosy. We have commercial relations with them, so that any endemic disease they harbour is of interest to us. In the Philippines there is much of leprosy and we know of its prevalence in Hawaii. At the lazaretto at Molokai there were recently 1,100 cases.

In 1892 a commission reported to the senate a total of 278 cases, which, in my private opinion, may be about one-fourth of the number of cases in the country today. I do not know that this need be a cause for great alarm. The contagiousness of leprosy is about that of tuberculosis. There are many instances of persons living in leper settlements for many years without contracting the disease. When we consider the number of cases that come into the country and the fact that most of them have died off without the disease spreading, we are led to believe that there is something in the better conditions and perhaps the higher intelligence obtaining here that militates against its increase. This, however, does not argue against our adopting all reasonable measures to check the spread of the disease. Tuberculosis we have



already with us, and we must make the best of a bad bargain; but leprosy is not yet firmly engrafted on our shores and can be exterminated by segregation.

#### DISCUSSION.

Dr. H. J. Scherck said that while he was an interne in the Charity Hospital, New Orleans, cases of leprosy were received as of any other disease. Later, when he became a visiting surgeon, he, together with Dr. Dyer, wrote a number of letters to the legislators and ultimately the Louisiana leper hospital was established. Dr. Scherck was appointed on the board of administrators of that hospital, and made visits weekly until he re-

signed. There are many more cases in Louisiana than people generally had any idea of.

There were families in which the mother or father were lepers and some of the children had remained perfectly healthy while others developed the disease. He did not believe a case was ever cured. Patients who were put on a good diet and made to eat and sleep regularly, with the use of chamoogra oil or antisiphilitic treatment, improved greatly and were sometimes apparently cured. There was no doubt that the Malay fishermen were a source of contagion. Whether their vocation or the fish industry had anything to do with it, he could not say.

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### SPECIMENS ILLUSTRATING THE IMPORTANCE OF CERTAIN POINTS IN THE DIAGNOSIS AND SURGICAL TREATMENT OF APPENDICITIS.\*

BY JOHN YOUNG BROWN, M. D., of St. Louis.

I wish to present tonight three specimens selected from a series of cases recently operated upon. My purpose in so doing is to illustrate the importance of certain points bearing on the diagnosis and surgical treatment of this disease.

*Specimen No. 1.*—This specimen I removed from one of my junior assistant physicians. He gave a history of having had several attacks of appendicitis, and had suffered considerable from gastro-intestinal disturbances. I saw him two hours after the onset of the acute attack. The symptoms were pronounced and I urged immediate operation, which was con-

sented to. The operation was set for 10 o'clock at night, and I had seen him at four in the afternoon. During my absence from the hospital he was seen by a prominent surgeon who advised delay. The symptoms grew gradually worse and on the following afternoon I removed the appendix. The specimen shows a stricture near the proximal end, a greatly dilated lumen beyond the stricture, a gangrenous mucosa and a large fecal concretion.

*Specimen No. 2.*—This specimen I removed from a patient admitted to the City Hospital on the fourth day of an acute attack, he having at the time of admission a pulse of 120, temperature 103.5°, and every evi-

\* Presented before the St. Louis Medical Society, June 3, 1905.

dence of a spreading peritonitis. This specimen shows a perforated and gangrenous appendix, and illustrates very forcibly the condition that would have been found in specimen No. 1 had the operation been deferred twenty-four hours.

*Specimen No. 3.*—This specimen I removed from a patient admitted to the City Hospital the fourth day of an acute attack of appendicitis. At the time of admission he had all the symptoms of a diffuse general peritonitis. The appendix is gangrenous and perforated and it shows the third stage of this disease, namely, a perforated appendix plus diffuse general peritonitis. All three of these cases recovered.

I have for a number of years entertained very radical views relative to the treatment of this condition. I believe appendicitis is a surgical disease from its inception, and should be treated surgically as soon as the diagnosis is made. I have been able time and time again to demonstrate the inability of the surgeon by any known methods to accurately diagnose the exact pathological condition going on about the appendix without exploring the case. Diagnosis of this condition is as a rule very simple. The patient generally makes the diagnosis before the doctor arrives. I have operated on cases where the temperature and pulse were practically normal at the time of operation and have found the appendix perforated and gangrenous. I have also operated on cases in which the symptoms pointed to grave pathological changes in the appendix, and have found the trouble limited to the appendix proper without perforation. The first speci-

men demonstrated very forcibly this point. This young man had a temperature under 100°, a pulse of 96. Local conditions well marked. The specimen conclusively shows that had operation been deferred we would have had in twenty-four hours a perforation with an accompanying peritonitis, or just such a condition as was found in the case from which specimen No. 2 was removed. Had case No. 2 been delayed twelve hours we would have had to deal with a diffuse peritonitis as was found in case No. 3.

Regarding the surgery of these cases, I believe that the appendix should be removed in every case, regardless of the stage of involvement. After removing the source of infection, namely, the appendix, it is my rule in all cases to examine the pelvis. I have many times cleaned out the iliac fossa, removed the appendix and apparently completed the work, but the finger run over the brim of the pelvis would reveal the pelvis filled with filth. The failure to examine and properly drain the pelvis I believe has been responsible for many deaths.

In dealing with a diffuse peritonitis, the result of a perforating appendicitis, Murphy has given us many valuable points. His statistics demonstrate conclusively that we have been doing entirely too much in such cases. If there is an attempt to clean out the peritoneal cavity by irrigation, mopping and rough bowel handling, the mortality in such cases will be terrific. If we, however, remove the source of infection, put a drain in the pelvis and then place the patient in the exaggerated Fowler position,



cleaning the drain by suction, many of these cases can be saved.

As to the treatment of the stump, we cannot lay down any hard and fast rules. Any of the recognized methods will prove satisfactory, but none are applicable to all cases. Personally, I prefer the purse string applied after clamping off and removing the appendix. In many of these cases it is impossible to use the purse string owing to the inflammatory thickening found about the base of the appendix. In such cases we can either ligate, or the appendix can be cut out of the head of the caecum, just as we would cut out the core of an apple, and closed with a double row of Lembert sutures, after the method suggested by Joe Price. It is interesting to note the many complicated instruments that have been devised for the treatment of the stump in appendicitis. I have found that the ordinary eight-inch Kocher clamp answers every purpose. With the proper distribution of gauze the appendix can be safely and quickly removed and the stump dealt with by any of the recognized methods without the aid of any of the complicated instruments devised for this purpose.

A word regarding the Ochsner, or so-called starvation treatment of appendicitis. Ochsner has been very largely misquoted and very greatly misunderstood. He is an earnest and enthusiastic advocate of the early surgical treatment of this disease. In cases seen late, with high temperature and widespread peritonitis, he advises that such cases be treated by removal of all food and drink by mouth, stomach lavage and rectal alimentation, claiming that by so doing

the omentum is given an opportunity to turn a beginning general peritonitis into a local peritonitis; in other words, that the patient will be tided over the acute attack, and can then be operated upon in the interim. This treatment has been seized upon by the opponents of the surgical treatment of appendicitis and has been wielded as an argument against operation. It has been applied to cases in which the originator never intended that it should be applied and has, therefore, resulted in setting back surgery rather than aiding it. In all cases of appendicitis the clinician and surgeon should work hand in hand. The failure of the clinician to recognize this condition is due in my opinion largely to the fact that they rarely see its pathology as it is revealed at the operating table. If the general practitioner would follow his cases to the operating table and there see the unanswerable pathological arguments crying for operations that are present in almost every case, we would get these cases earlier and the mortality would be correspondingly reduced. The physician or surgeon who urges a patient suffering from acute appendicitis to wait for an interval operation, assumes a great responsibility. All these cases do not reach an interval, and many of those that do, refuse operation. A man who has had one attack of appendicitis should have his appendix removed. The insurance companies now refuse to insure applicants who have suffered from this disease. Neither the surgeon nor the physician can afford to advise his patient to assume a risk that a corporation would not carry. I hope that these brief re



marks will bring out a full discussion of this subject.

#### DISCUSSION.

Dr. O. H. Elbrecht had been at first rather discouraged with the technique of the purse-string operation. Recently an article had appeared in which the author claimed that at least 50 per cent. of the cases treated by the clamp, and then invaginated, opened up before the invagination was complete. Within the last year Dr. Elbrecht had removed eighty-two appendices, and but one had opened up. The purse-string technique was certainly the cleanest and quickest method of all. He objected to the cuff method because he believed one thereby buried infection.

Dr. C. C. Morris thought Dr. Scott was right in saying that some cases get well without operation. He agreed with Dr. Brown with reference to drainage, but he had given up the use of the glass drainage tube, simply using a gauze wick. In cases of diffuse peritonitis where the appendix was not readily discovered, it was better to simply open the belly cavity and drain the wound. His usual method of treating the appendix was to cut the appendix off flush with the caecum. This operation could be performed as quickly as any of the other methods. There was nothing left to bury, and there was no infectious material to confine and no raw surface, for the sutures were passed between the mucous and serous coats. When the appendix was removed there were two points to bear in mind: remove all infectious material and see that there was no possible chance for a leak from the stump.

Dr. William S. Dutch believed Dr. Moore was right and that surgeons did lay themselves open to criticism. He did not believe a surgeon who had left the appendix in the abdomen should say that that patient was cured. It could not be proved except at the *post mortem* table that the appendix had not created some trouble in the belly. However, he believed it was generally admitted that the internists differ as to methods of treatment of diseases. Since it was not possible to look into the belly with the x-ray and see what was going on they simply tried to do the best they could in the individual case. Occasionally a case would be seen which could not be diagnosed by the physicians or surgeon. He had just operated on a case which looked like appendicitis, yet the appendix was in a perfectly normal condition, but there were three ulcers near the caecum, giving rise to all of the pain and fever. He thought Dr. Moore was a little severe in thinking they could not come to conclusions. He believed the men of the younger class at least, had come to the conclusion the appendix should be removed, and the sooner the better, and that hesitation simply meant to give the patient a chance to die.

Dr. Brown in closing, referring to the starvation treatment of these cases, said it was unfortunate, in his opinion, that Ochsner had ever given this treatment to the profession. Ochsner was thoroughly radical in his views relative to dealing with appendicitis. It was exceedingly unfortunate that the practitioner did not go the operating table with the surgeon more frequently. No one could

have any conception of the nature of appendicitis without having a thorough familiarity with the conditions as they present themselves in the operating room. As to the treatment of the stump, he did not consider any method applicable to all conditions. All methods were comparatively simple. As to the general practitioner in his relation to the surgeon, there should be no antagonism between them. The clinician was useful in such cases, but he should work hand in hand with the surgeon to get the best results. The failure of physician to diagnose these conditions was due to the fact that he was not as familiar

with the pathology of the case as the surgeon. As to diagnosis, there was no disease that did not sometimes present difficulties, but when there was an inflammatory condition in the abdomen an exploratory laparotomy was to the advantage of both patient and surgeon. A great many people die of appendicitis because they reach the surgeon too late. If the clinician would see more intraperitoneal surgery he and the surgeon would get nearer together and many patients would be saved. He was convinced, too, that many of the cases referred to as cured without operation ultimately reached the operating table.

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#### A METHOD OF RADICAL RELIEF OF CASES OF DEAFNESS LONG ABANDONED AS HOPELESS; ILLUSTRATED BY A CASE OF NINETEEN YEARS' STANDING.\*

BY ROBERT BARCLAY, M. D., of St. Louis, Mo.

A man, aged thirty-seven years, formerly a traveling salesman, but latterly employed as a street-railroad conductor, came to consult me respecting the possibility of securing, through an aural operation, radical relief of dullness and severe pains in the head, vertigo, and ear discharge which was, itself, not only very fetid, but had rendered his breath offensive, much to his embarrassment and mortification, socially, as well as commercially. He had been led to consult me the more willingly, from the fact that Dr. Edward P. North of this City had kindly taken an interest in his case, so far as to inform him, that the operation of tympanic resection, advocated by

me in such cases, was designed to relieve, not only from ear discharge, vertigo, headache and other active and annoying symptoms, but from deafness as well—a blessing for which he had long since ceased to hope. However, the former symptoms of which he complained—dullness and severe pains in the head, vertigo, fetid discharge, and offensive breath,—had become so annoying as, finally, to demand attention. Right here, it might be as well to state, that his disability had prevented his continuing the pursuit of his calling as a salesman; his going into business for himself, as intended; his promotion to the more lucrative position of inspector on his road; and his financial success, because of prolonged expense,

\*Read before the St. Louis Medical Society of Missouri, June 17, 1905.



and occasional absence from his business, attendant upon the intercurrent exacerbations of his disease.

Examination of his right ear showed the destructive effects of suppurative otitis media, which had continued in spite of treatment, for over nineteen years, and which had been brought on, originally, in boyhood, by swimming and diving. The greater part of the vibrating portion of the drum-head was gone; and the neighboring parts were coated with fetid, pasty pus. The only irritant of extra-aural origin, recognized in the case, was some dental irritation; which was subsequently removed.

The operation of tympanic resection, recommended by me, was consented to; and he was operated upon, thus, on the 29th of December.

Excepting a trifling amount, upon the ninth day, there has been no discharge whatever from the ear, since the fifth day after the operation; and his headache, vertigo, fetor, etc., disappeared at once.

The previous condition of his hearing, and the effects of the operation upon it, can perhaps be most fully appreciated through the following, of the patient's own statements:

[Before the operation.] "I could not distinguish a word spoken in my right ear."

[On the fourth day after the operation.] "At the present time, I can hear a whisper; and can hear common conversation in an adjoining room."

[On the seventh day after the operation.] "I can talk" (he means "hear") "through the telephone with the operated ear."

[Shortly after the operation, he re-

turned to work; and, on the thirty-ninth day after it, stated of the operation]: "I can say, that it was beyond my expectations; for my hearing is so good, that it is annoying at times. People talking to me, at times seems as if they were shouting; and the noise of a street-car is almost deafening."

"I do not have head-ache at all."

"Before the operation, in a conversation, I was always saying 'What?' because I did not hear; and now, I find it nothing but a habit; for I can hear as good as any one. It took me some time to get used to the sounds; for it seemed strange to me, to hear noises that I never heard before. It has been a great help to me in my work; for I have to answer a great many questions, and from all classes of people; and I find that my hearing gets better all the time."

I have seen him several times during the past few months, and he declares himself more and more delighted with the results of the operation.

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I have presented the report of this case, this evening, for the purpose, once more, of directing your special attention to a method of treatment, whereby we may give radical relief to a large number of cases of deafness, which, from time immemorial, have been generally abandoned as intractable, and are almost universally found hopelessly incurable by all ordinary methods of treatment. I allude especially to such cases as, after having stubbornly resisted the curative influence of ordinary remedies at the hands of presumably qualified practitioners, for years, have at last lost all hope of relief of their deafness.



These are cases of deafness, where, on the one hand, every effort has been made to "guard the patient from changes of temperature and moisture, to improve his hygienic surroundings, regulate his diet and improve the general health and tone of the system; where, when hypertrophy and hyperæmia of the mucous membrane, and closure of the Eustachian tube have played the principal part, general treatment has been supplemented by judicious use of the Politzer bag and Eustachian catheter, and suitable local treatment of the nasal and naso-pharyngeal catarrh."

These are cases of deafness, on the other hand, where the patient, for months and years, going perhaps from specialist to specialist, has faithfully submitted to the prescribed treatment,—such as "syrringing; astrin-gent, caustic and antiseptic applica-tion; the insufflation of powders; the application of electricity; the inflation and stimulation of the middle-ear by means of air or vapors passed through the Eustachian tube; or treatment of the throat."

Cases of deafness, where, on the one hand, measures such as these have been faithfully and intelligently carried out, oftentimes for years and years, and are found at last to be all in vain—and, on the other, where the patients have finally abandoned all hope of relief of their deafness—these are the cases that I have referred to, on the one hand, as "popularly deemed hopelessly incurable," on the other, as those of "hopeless deafness." And these are the cases, in whose interest, I ask your attention, most carefully, to the modern method of treatment, recently developed along

rational lines, for the radical relief of the condition underlying their deafness and other most distressing symptoms. For, associated with the deafness in these cases, we find usually one or more of the following symptoms, for the relief of which, frequently, they are driven to us, perhaps long after they have abandoned all hope of relief of their deafness—in some cases, indeed, after many, many years; as in the case cited by me, this evening, in illustration. Any of the following may occur with the deafness as concomitant symptoms:

Dizziness;

Discharge from the ear;

Habitual low-speaking voice;

Better hearing in a noise (worse hearing in quiet places); and

Aural distress.

Now, several of these symptoms are common to cases of deafness whether from catarrhal or from purulent middle-ear disease, arising, as they do, in either case, from a similar underlying physical condition. This condition is that of altered tension and mobility in the auditory conducting mechanism—the transmitting structures of the middle-ear, and their appendages—lying between the external auditory canal, without, and the labyrinthine nervous apparatus, within,—a condition that disturbs labyrinthine tension, and acts as an obstacle to the normal transmission of the force of sound-waves, to and from a functionally active labyrinth and auditory nerve, within,—a condition, as you very readily understand, attended with chronic progressive deafness, and with dizziness, noises in the head and ears, habitual low-speaking voice, better hearing in a noise (worse hear-

ing in quiet places), aural distress—one, several, or all of these symptoms.

Whether or not this underlying physical condition obtains in catarrhal or in purulent inflammation of the middle-ear, is immaterial, so far as regards the principle that is to guide us, in any given case, in our effort to afford relief of deafness. That principle is,—to eliminate the aforesaid underlying physical condition of altered tension and mobility in the auditory conducting mechanism; to effect the liberation of the deeper portion of the auditory conducting mechanism, still movable, from the permanently immobilized portion without; while making provision, also, for natural drainage, and for admission of aerial sound-waves directly to the deeper, still movable portion of the auditory conducting mechanism and labyrinthine nervous apparatus within; while providing for free exit of sound-waves, normally seeking exit through the tissues of the head and ear.

An additional feature, however, presents, in such cases, if the deafness be attended by discharge from the ear, or active purulent inflammation of the middle ear. Here, we are concerned, not only with correcting abnormal tension and mobility of the conducting mechanism, but with putting a stop to an actively destructive and infectious process; the problem, here, therefore, involving, as well, that especially of establishing free drainage, removing diseased products, quieting irritation, sustaining and reinforcing vitality, and keeping the affected parts clean and disinfected. Where, in such cases, this cannot be

accomplished by medicinal means, whether or not the mastoid cells have already become involved, the method advised herein should be resorted to; inasmuch as the so-called "mastoid operation" alone is at best an illogical, imperfect and hazardous resource, mentioned here only to be, by itself, unqualifiedly condemned.

In cases of deafness depending, as explained, upon an immobilization of the outer portion of the auditory conducting mechanism, whether from fixation or from increased inertia,—especially when due to a catarrhal process,—low-pitched sounds are found the more difficult of transmission to the auditory nerve. Likewise, sound-waves generated within the patient's own head—whether by chewing, talking or singing; by the pulsation of the auditory, or their neighboring blood-vessels; or by the friction of the blood-current upon the vessel walls—sound-waves, generated thus within the patient's own head, normally seeking exit by transmission through the tissues of the head and ear, meet with obstruction on reaching the immobilized portion of the auditory conducting mechanism, and are reflected inward by it; thus agitating the more deeply lying and still movable parts of the conducting mechanism,—giving the patient the same impression as if these sounds had come inwards, from a point without and beyond the movable portion—thus, practically, producing an echo in his own auditory conducting mechanism. Consequently, he is troubled with the so-called "head-noises," "death-bells," etc. In this way, also, the sound of his own voice, especially, appears to him



increased in force and volume,—that is, by this echo in his auditory conducting mechanism—and it impinges so strongly upon his auditory nerve, as to deceive him as to the actual volume of his own voice. He thereupon lowers the tone of his voice, always augmented by the echo in his ear, until it seems of normal volume, so far as he himself can determine. Consequently, he speaks habitually in an abnormally moderated or low tone of voice.

In a quiet place, such a patient usually hears worse. Whereas, when in a noisy place—as, for example, in a moving street-car, or in a noisy machine-shop—he will usually find that he can, while there, hear speech and other sounds much better. This is because the constant noise shakes loose that portion of his auditory conducting mechanism that elsewhere is more immobilized by abnormal tension; and the transmission of other sounds, to the deeper, still movable, and the perceptive parts of the ear, is, in the noisy place, thus rendered more easy.

If, therefore, among hopeless cases of deafness,—particularly if they be victims of so-called aural “catarrh,”—you happen to meet one who speaks habitually in an abnormally moderated or low tone of voice, enquire whether or not he can hear better when in a noisy place. By the exercise of ordinary tact, any one can secure, without impertinence, information upon this point, sufficient to arrive, off-hand, at some approximately correct conclusion as to the nature of the condition underlying the deafness; and whether or not it be such as might probably be relieved by this opera-

tion. As an example of the information usually to be elicited upon this point from such cases, I recall one, where, when the street-car was quietly stationary, the conversation of any one sitting alongside was heard with difficulty by the patient; while, on the other hand, when the car was in motion, noisily, of course, the hearing was so acute, that the conversation of couples, sometimes as far as six seats distant, was very readily heard, — upon some occasions, the patient stated, where the character of the conversation was evidently such, that the speakers would, consciously, certainly not have allowed it to be overheard by others; and there actually were others seated between the patient and the speakers, even in the seat next in front of the speakers.

I would repeat: if, therefore, you happen to meet any deaf person,—particularly if he be a victim of so-called aural “catarrh,”—who speaks habitually in an abnormally moderated or low tone of voice, and who can hear better in a noise or noisy place, rest assured that you have met with a case of immobilization of the outer portion of the auditory conducting mechanism, and that he has a reasonable hope of radical relief by the method of treatment under consideration. For my experience has been, that *any very deaf person who speaks habitually in an abnormally moderated or low tone of voice, who hears better in a noise or noisy place,—no matter how long he may already have been afflicted, and notwithstanding that every other remedial measure may have been tried in vain,—may yet be relieved by resection of the auditory conducting mechanism,*



*proportionately to the distinctness of these symptoms.*

The appropriate details of such surgical procedure are peculiar to each individual case, and are to be estimated and put into execution, modified in detail, step by step, as the surgical and anatomical conditions confronting the operator may indicate, throughout; the best guide being the judgment of the operator—it being assumed, of course, that the case is in the hands of one practically familiar with the surgical anatomy and the physiology of the ear, and thoroughly skilled in such difficult, deep aural surgery. In my own experience, the form of operation most frequently indicated in the old hopeless cases, has been that effecting the removal of the drum-head, hammer and anvil bones—the stirrup bone, also, being occasionally removed; and bands, synechiæ, septa, growths, etc., dealt with, as indicated, sufficiently to liberate and expose the more deeply lying auditory structures. This not only eliminates the defects of drainage by the natural route, in the cases of discharge from the ear; but, in the “catarrhal” ones, so exposes the mucous membrane of the drum-cavity, that it undergoes a progressive skin-like or demoid transformation, with disappearance of the mucous gland as such.

The beautifully constructed, delicate aural surgical instruments of the present day, together with the visual and manual dexterity of the expert specialist,—essentials of perfect surgical technique,—ensure rapid, accurate, and thorough operation. Extreme care is to-day exercised, both during its performance and after-

wards, to avoid any manipulation or procedure whatever that might, even in the least degree, tend to injure or irritate the remaining structures of the drum-cavity. Careful attention is to-day given to the diet and general condition of the patient. In short, every precaution is taken towards simplifying the operation of to-day, so far that secondary inflammation is unlooked for; and a reformation of membrane—the so-called “substitutive drum-head”—at the site of the normal drum-head, is exceptional. And even when such membrane actually does form, it is readily removable under local anesthesia; and is eventually disposed of thus, either with or without the application of Traumaticin, containing a little Salicylic Acid, and by restricting the patient’s diet for a variable period.

Remember, please, that when resorted to for the radical relief of cases of hopeless deafness, this operation of tympanic resection is only designed to effect, by force, the elimination of the mechanical condition of altered tension and mobility in the auditory conducting mechanism,—a condition that disturbs labyrinthine tension, and acts as an obstacle to the normal transmission of the force of sound-waves, to and from a functionally active labyrinth and auditory nerve, within,—a condition attended with chronic progressive deafness, aural vertigo, head-noises, etc., one, several, or all of these symptoms.

And, this operation is advisable only where this condition is not amenable to medicinal, hygienic, or other non-surgical treatment. Where the more deeply-lying parts would

obviously not be mechanically affected by such procedure, it is not admissible.

With immobilization of the auditory conducting mechanism, we may find a defective condition of the auditory nervous, perceptive apparatus. Where the latter is due, partly, to abnormal labyrinthine tension; partly, to deficient exercise of the auditory nerve terminals, through infrequency or weakness of such sound-waves as manage to reach them; and partly, to psychicemotional depression attending the affliction of chronic deafness, with aural vertigo, or head-noises,—this operation is indicated. And it operates beneficially, not only upon the one ear, but also upon its fellow of the opposite side; and for the following reason: Abnormal tension of the conducting mechanism of one ear may produce abnormal tension of the labyrinth, so far as to impair the function of its special nervous apparatus—the auditory nerve and its auditory centre. The auditory centre of the one ear, normally, furnishes a portion of the nervous supply of the ear of the opposite side. When, therefore, the functional activity of this auditory centre becomes impaired by abnormal tension in the one ear, the fellow-ear will so far be deprived of its normal nervous supply, and will suffer in consequence. If, on the other hand, the condition of abnormal labyrinthine tension, in the ear first affected, be removed by timely resection of its conducting mechanism, this entire chain of morbid phenomena may be released, and the fellow-ear rescued. Practically, this fact has been demonstrated conclusively by extended clin-

ical experience with the operation.

In cases, therefore, where abnormal labyrinthine tension, in the ear first affected, would probably be reduced by this procedure, even when there appears probability of but slight benefit to the hearing of this ear, the operation seems generally advisable; inasmuch as it tends, so far as observed, to conserve the hearing of the opposite ear, which otherwise would inevitably become impaired.

To formulate a maxim, then, we may submit the following:

As soon as it is evident, that ordinary and time-worn methods are powerless to cure, this novel radical one should be resorted to—and without unnecessary delay—as neglect to remove the obstacle in the auditory conducting mechanism only keeps the more deeply lying parts the longer without exercise of their normal functions, affects the tension of the labyrinth, and, in so far, tends to impair them, as well as to involve the function of the opposite ear. For the sake of the other ear, then, even if there be hope of but slight benefit to the hearing of the first ear, this method should be employed.

As an indication of what might be expected of this operation, I would remark, that I have seen case after case, over and over, which had been afflicted with discharge from the ear, for a period, preceding the operation, of twenty, twenty-five, thirty, thirty-five, and nearly forty years, promptly and permanently relieved by this method.

I recall a case of so-called “catarrh,” in which one ear had been wholly “out of use” for about twenty



years, before the rapid, almost total loss of hearing on the other side. In this case, the operation afforded relief to the long abandoned ear at once; and to such a degree, that it, exclusively, has since been used, and satisfactorily depended upon, by the patient, for telephone communication, and in his social and commercial intercourse.

In another case of marked deafness, where the patient stated, "that for ten years, he was so dizzy that he had no rest, day or night," entire relief of this symptom was afforded by operation; and his hearing was so far restored, that he can hear every ordinary sound satisfactorily—for instance, the tick of a clock in his room, which, before operation, he could not hear unless close to his ear, he can now hear plainly from across the room, even when lying down.

Another patient, who claimed to have had his ear affliction for about thirty years, with ringing noises in his head and ear, and dizziness so severe, at times, as to compel his clinging to something fixed for protection, and who stated, that, to the best of his recollection, "he had never been able to hear a sound of any kind from his affected ear,"—this patient was relieved at once by the operation; and can "hear plainly," can also "hear as well as any one through a telephone," and can "even hear a whisper, or a watch tick, in the ear operated upon."

In one case operated upon, the hearing upon the opposite side was so markedly improved by the operation upon the worse ear, that, within four hours afterwards, the tick of a watch was heard, which had previ-

ously been inaudible for about six months.

In other cases of this character, where the deafness, dizziness, and head-noises had persisted for from twenty to thirty-three years or longer, I have seen radical relief afforded from the subjective symptoms, and entirely satisfactory hearing restored, not only for ordinary conversation, music, telephony, etc., but made reliable for long distances,—twenty-five feet or more,—as, in one case, where before operation, shouting voice only at several feet distance, was all that could be heard.

It would be useless, here, further to enumerate details or multiply illustrations. If such are desired, I should be pleased to furnish them, upon request, in reprints of or references to reports of cases, made before representative medical societies; and from my records.

I am well aware, that there are otologists who appear to have given up the operation on the middle-ear structures in chronic deafness from "catarrh," disappointed in their results. Without presuming to speculate upon the reasons for their misfortune, I can only regret, that their practical experience has not proved as encouraging as my own. A moment's reflection, however, will serve to show how irrational it is, to condemn a potent agent, such as this, as harmful or useless, simply because of results, however lamentable or disappointing in themselves, arising from the indiscriminate or inappropriate employment of such agent. Particularly, since propriety and reason affirm of this, as of every other



resource, whatsoever, that its value lies, not only in its application, but in its proper application. And where occasionally, we meet with marked instances of the undoubtedly advantageous application of a remedy, obviously so beneficent as this one, failure or disappointment should but strengthen our determination to perfect the search for the exact indication for its employment.

These, as far as known, I have tried to state and to explain to you.

In conclusion, the writer would modestly express the hope, that this paper may serve to direct the attention of some hearer—one more professional brother—to the resection of the auditory conducting mechanism as a method of radical relief for hopeless cases of deafness, with or without discharge from the ear,—whose merits certainly entitle it to more careful consideration than it appears hitherto to have been shown by the medical profession generally.

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A PRACTICAL SUGGESTION RESPECTING THE REMOVAL OF  
FOREIGN BODIES FROM THE LARYNX; ILLUSTRATED BY A CASE OF COCKLE-BURR  
UPON THE VOCAL CORDS.\*

BY ROBERT BARCLAY, M. D., St. Louis, Mo.

On a Sunday afternoon, several years ago, a lady of German parentage, aged twenty-two years, was brought to me by Dr. G. H. Schroepfel, of Collinsville, Illinois, for relief of symptoms, supposed to be due to the presence of a foreign-body in the larynx.

It was stated, that, the second evening before, while on the way homeward after dark, an ordinary cockle-burr had become caught upon her dress-skirt. This, she removed; but finding it impossible then to cast it away from the cloth gloves that she wore, she pulled it from them with her teeth; whereupon it sprang back into her mouth and throat, and began choking and smothering her.

"Before I brought her to St. Louis," said Dr. Schroepfel, "the history and treatment were as follows:

On the evening of the second day before our visit to your office, I was called to see the patient, who lived three miles in the country; the messenger stating, that the lady had swallowed something, which had become fastened in her throat. I hurried to the scene, as fast as possible, to give her assistance; thinking that a piece of meat or other edible had become wedged in her throat, which would be apt to cause death from strangulation.

"When I arrived, I found the patient much perturbed and excited, but evidently not suffering any pain or difficulty in breathing; but she was unable to speak above a whisper. I did not know what was the cause of the aphonia, which had developed so suddenly; so, after thorough interrogation, I was able to get a statement to the effect, that she had swallowed a cockle-burr. I, at once, made as thorough examination as the absence of

\* Read before the St. Louis Medical Society of Missouri, June 17, 1905.

necessary apparatus permitted; but could discover nothing.

"Then the œsophageal bougie was introduced and an attempt made to displace the offending body; but again without success.

"I gave her a throat-wash; and, as she was not distressed, asked her to come to my office next morning, where I again examined her; but could not find anything.

"That the foreign-body had lodged deep into the larynx, I was satisfied; so I asked my consultant, Dr. Siegel, to examine her. He could not locate the berry either. So, I advised her to go to St. Louis to a specialist and have her throat examined; and, if possible, to have the foreign-body removed."

At the time when I first saw her, there was no pronounced dyspnœa; and the patient could speak in a hoarse whisper.

Upon introducing the laryngeal mirror, the cause of her trouble and the reason for the peculiar aggregation of symptoms—the presence of a cockle-burr upon the vocal cords—was at once evident.

That you may understand my description, perhaps, more readily, my little son has kindly made these enlarged drawings from my original clinical sketch.†

Right upon the vocal glottis, the respiratory portion being comparatively uninvolved, was fixed the cockle-burr, (which I show you in this bottle). It lay antero-posteriorly, its long axis almost exactly corresponding with the median line of the rima-glottidis. Its base was directed

†Not published here.

backwards. The point of the sharp spine at its apex was imbedded, anteriorly, apparently just above the commissure of the vocal cords, in the lower curve of the cushion of the epiglottis. From its position, it seemed as if the tips of some of its tentacles must necessarily be in the ventricle of the larynx, upon either side.

Those of you who have met with cases of cockle-burr in the larynx, or have read the literature on the subject—such as the reported experiences‡ of Dr. Max Thorner of Cincinnati, Dr. Crawley, Dr. J. F. Thompson, Dr. Sajous, and our own esteemed townsman, Dr. Wm. C. Glasgow, and Dr. Gregory with him—will appreciate the problem presented: to remove this cockle-burr with least possible injury to the larynx.

The one great immediate difficulty with which one may have to contend, in attempting forcibly to remove a foreign-body of this character from this stronghold, is that of the intense reflex laryngeal spasm which may be excited thereby, against the sharp spines and tenacles of the cockle-burr.

Noting carefully the situation of the cockle-burr, and realizing, that, if I would more peaceably and certainly

‡Consult Burnett's *System of Diseases of the Ear, Nose and Throat*, 1893, Vol. II, pp. 525-526.

*Medical News*, Philadelphia, 1885, XLVII, p. 677, and 1886, XLIX, p. 657.

*Cincinnati Lancet Clinie*, 1886, N. S., Vol. XVII, p. 93.

Chas. E. Sajous' *Annual of the Med. Sciences*, 1888, Vol. III, p. 306.

*Jour. Amer. Med. Asso.*, 1887.

*St. Louis Courier of Medicine*, Vol. I, No. 5, May, 1879, pp. 518-520.



and with less damage remove it, I would have to provide against this difficulty; it occurred to me—and this is the suggestion I venture to make for your consideration—to invoke the aid of an antagonistic reflex; a reflex, not only antagonistic to, but, as I believed, far more imperious than that of the dreaded laryngeal spasmodic reflex,—namely, that of the demand of the body for oxygen after forced prolonged expiration.

It occurred to me, also, that the necessity of emptying the lungs at once, immediately after a forced, deep and full inspiration, would prove so imperious as to eliminate the tendency to spasm of the larynx, if, at the very instant of beginning expiration, the foreign-body were seized with the forceps without traction, and held, immovably, until the termination of the purposed forced prolonged expiration,—when it was intended to extract the burr.

This course was determined upon; a Fauvel laryngeal forceps with transverse bite (which I here show you) being selected for the purpose.

A light spray of Cocaine solution was then applied, to anesthetize the superficial tissues of the larynx; after which, the patient was instructed as to her part of the procedure. She was directed, upon the word, to take a slow, very deep, forced inspiration; and then, at the words "Say A!" (not "Ah!") to attempt to phonate that vowel. She was directed to prolong this sound, "A," however much it might tax her to do so at the end of her breath, until I should give her the command, "Breathe!", when she was to take a sudden, quick, full breath. Having demonstrated this

on myself, several times, to her entire comprehension, I introduced the laryngeal mirror and the Fauvel forceps. Passing the forceps, at the proper moment, behind the cockle-burr, the blades were gently separated, and the body of the cockle-burr was seized firmly, just as the patient responded to the command to "Say 'A'!" It was held immovably, as the urgent command was loudly repeated, again and again, to "Keep on saying 'A'!"—until I saw that she was growing desperate for "air;" when I gave her the order, "Breathe!"

The larynx at once relaxed into the position of forced inspiration; and as it did so, a slight wig-wag motion of the forceps instantly brought away the entire cockle-burr, without the loss of a single one of its tenacles, and without wounding any of the laryngeal tissues.

The patient forthwith returned home with Dr. Schroeppel; who subsequently reported her prompt and uneventful recovery.

3894 Washington Boulevard, St. Louis, Mo.

#### DISCUSSION.

Dr. Greenfield Sluder said most of the foreign bodies in the larynx were swallowed. The majority of such cases were bones—little chicken bones or fish bones, pins or tacks that had been held in the mouth. He had seen a number of cases of fish bones accidentally swallowed. They were not apt to go down far as the sharp point of the fish bone punctured the tissue and lodged there. He had seen two fixed in the tonsil protruding directly through. He had found fish bones embedded in the base of



the tongue directly at right angles to the surface. Such foreign bodies were sometimes exceedingly difficult to recognize. The two mentioned protruded about one thirty-second of an inch and were very difficult to discover but easily removed. But these were different from the cockle-burr which must needs be breathed in. About a year ago he saw a baby that had swallowed a shoe button. There was nothing to be seen in the larynx or pharynx but auscultation of the chest showed that the right lung was entirely closed off. The case was referred to Dr. Carson and through a tracheotomy wound the shoe button was removed. A case sent to him recently was exceedingly interesting. The patient, a woman about thirty-five years of age, put a pin in her mouth and swallowed it. She localized it about the right tonsil. An x-ray photograph showed no pin, but she declared the pin was there and hurt violently. More x-ray pictures were made but none of them showed the pin. Finally the patient went to a surgeon, who examined her throat, located the foreign body and operated, taking out the styloid process of the temporal bone as a foreign body. It was much elongated and in her efforts to dislodge the foreign body the patient evidently had broken off the styloid process with her finger. In two or three weeks she returned to Dr. Sluder. He made a very careful examination but could find nothing. The patient was then sent to a neurologist and treated for hysteria. Later she came back to him and insisted that the pin was still there. He thought possibly it might be a calculus in the tonsil, so he anesthe-

tized the tonsil and transfixed it but could find no calculus. He concluded that he might set her mind at rest if the tonsil was taken out. After consultation with the surgeon and her regular attendant, the tonsil was removed but the pin was not found and the patient thought it was still there.

Dr. Joseph Grindon was reminded by this experience of Dr. Sluder's of a case he had some twenty years ago, while he was assistant physician to the Poor House. His attention was called to an insane female patient who insisted that she had swallowed a pin and had for years complained of its presence in her larynx. She had asked every doctor there to remove that pin. The speaker finally agreed to remove it. She was given a little homeopathic anesthesia, a show of instruments was made, a drop of blood was brought and having an ordinary pin ready in the forceps the doctor pretended to pull it out and showed it to the patient. She gave it a glance, and said with much disgust, "That ain't it; it was a black pin."

Dr. Robert Carr Block said that as to the difficulties of diagnosis, the sensation of any foreign body in the larynx, pharynx or esophagus is manifested over the laryngo-tracheal region, and unless there is marked dyspnoea, only by thorough examination could its location be determined. It is a rule in these cases, unless there is necessity for hurried tracheotomy or other operative procedure, that inversion should be first employed.

Dr. Barclay, in closing, said there was a difference between the voices of those having a fixation of the outer

portion of the conducting mechanism of the middle-ear and those who did not have such fixation. Those who were deaf from a nervous disease spoke in a higher-pitched tone and more loudly—occasionally they would even shout; but those having a fixation of the outer portion of the conducting mechanism of the middle-ear spoke in a tone of less volume on account of the echo in their own ear. It used to be thought that the irritation of the nervous apparatus, from jarring in a noisy place, was one of the things that helped the hearing of these people I am specially speaking of this evening; but the same shaking up takes place in the normal ear, which hears worse in a noise. He knew some of these people who could, in a noisy place, hear a voice of normal pitch, which a person with healthy ears could not. Such people said they could hear as well as anybody while on the moving cars. Again, it was not the voices alone, but the uniform sounds of the starting and stopping bells, the gongs, etc., that were perfectly heard, bringing out the point that such patients could hear better in a noise. This was one of the features that constituted an indication for operation in these cases. Not long ago a patient who had been advised by Loewenberg, of Paris, and two eminent otologists of New York City, to undergo a mastoid exenteration operation, had consulted the speaker in regard to the advisability of such operation. At a previous operation the hammer had been removed, but the anvil still remained, hidden in the attic of the tympanum. Dr. Barclay removed this from the entrance of the

mastoid antrum, with a curved hook, and the patient was thereby relieved of his deafness and no longer troubled with the discharge from the ear. He can hear a whisper now at twenty-five feet distance.

The operation must be indicated as beneficial to many patients, however many others may have been already ruined by it. Dr. Hypes would bear him out in the statement that another one, and one of the most beneficent instruments (the obstetric forceps), was a most murderous and barbarous instrument if wrongly or inappropriately used. And so it was with this operation, which had been used often in the wrong cases or possibly imperfectly performed. Because some people used the obstetric forceps when contra-indicated did not lessen the value of the forceps as an instrument of advantage, nor did the improper performance of this operation indicate that it was of uncertain or no value. The clinical and surgical evidence proved that the explanation here offered of these two symptoms was correct. When the removal of the obstacle stopped the noises in the ear and gave relief, they were certainly a proper indication for the performance of such operation.

As to consequent suppuration, after dealing thus surgically with the middle-ear, one should meddle with the uninvolved parts just as little as possible. Of course, if one shot a lot of stimulating powder or iodoform, or pushed gauze or cotton down there, there would be a reaction from the tympanic mucous membrane.

For the benefit of Dr. Hutchinson, Dr. Barclay would state that he had covered all these points in former

articles. Dr. Sluder and Dr. Block, in their discussion on the subject of foreign bodies in the larynx, had touched one very interesting point, namely, that such a body was often supposed by the patient, from his symptoms, to be in one place when it was actually in another. He had had, upon one occasion, a man tell him that he had swallowed a chicken bone and that it was away down on the left side of the larynx, "for he felt it there." There was a little congested spot on the palate which, when touched, caused the patient to say

that that was the spot. It was cocaineized, and from it a small piece of chicken bone was removed, giving relief.

Replying to Dr. Sluder, Dr. Barclay said that the burr could not slip away from him during the sudden over-expansion of the larynx, for he had too firm a hold upon it. Where one had a foreign body in the larynx, and could first secure such firm hold, this seemed a most practical method of removal; he trusted that some of the gentlemen present would try it and report results.



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# JOURNAL

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## MISSOURI STATE MEDICAL ASSOCIATION

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*E. J. GOODWIN, M. D., Associate Editor.*

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## EDITORIAL.

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### THE NEW BUILDING OF THE ST. LOUIS MEDICAL SOCIETY.

We take pleasure and pride in recording this month an event which seems to us to be of the first importance in the history of the St. Louis Medical Society, namely, the decision of that body to erect for itself a permanent home.

While the Society in the sixty-eight years of its existence has had an honorable and useful career, yet we may say, in all loyalty, that it has never yet risen to the full measure of accomplishment. In the character of its membership and in the quality of the scientific work recorded in its transactions, it has realized the de-

mands of its friends, but its influence for good has never reached more than a fraction of the St. Louis profession. Its membership has never been one-half of what it should be. Various causes contributed to this condition. For one thing, many of us for a long time failed to appreciate the value of association and organization. The present policy of the National and State Associations is rapidly educating the profession in this particular. Again, many of our best men were for years kept apart by factional enmities, born of a want of charity, which mistook prejudice for principle, and of the narrow mistake that their interests were opposed; whereas, in truth, they were common. This attitude of seclusion and distrust is now out of date. The few who still cherish it, do so to their detriment alone. One only has to look around to realize that there obtains more true harmony, a broader charity, more willingness to understand one another and work in common, and therefore a pleasanter atmosphere about the St. Louis profession to-day than ever before.

Another factor which stunted the growth of the Society was the lack of a home. The representative medical organization of this great city, although a corporate body, had no *corpus*. It was a disembodied sprite. The Society was like the man who attempts to raise his family in a hotel. He can never achieve the consideration in his community which belongs to the solid householder. The children suffer, and it is notorious that they are never numerous. A similar cause in the case of the Society was followed by a like effect.

In the early days of its history the Society met in the basement of a Presbyterian church on the corner of Fifth and Olive streets, and later in the old building of the St. Louis Medical College on Seventh and Myrtle streets. This state of things was necessarily only temporary. Later an arrangement was entered into with the St. Louis Public School Library by which the Society paid to the Library a certain sum for each of its members, the Library on its part giving members of the Society membership in the Library, furnishing the Society with a meeting hall rent free, and setting apart the money received from the Society for the purchase of such medical books and journals as the Society might designate. When the place of the Public School Library was taken by the Public Library, all citizens of the city acquired an equal right to membership free of charge, and the arrangement necessarily lapsed. The members of the Society at that time renounced all right and title to the books which had been purchased with their money, save such title as they held in common with all other citizens. In consideration of past relations, however, the Society was allowed to continue in the use of a meeting place one night in the week.

While this arrangement was entered into in good faith on both sides, its results were most unfortunate to the Society. The failure to realize the spirit of its provisions is chargeable to neither organization alone. Its main effect was to keep the Society for years in swaddling clothes. Recent investigations show that the tissues of the child at birth contain an excess of



iron, which is of use in supplying the deficiency of that element in the milk. Toward the end of the first year the iron reserve is exhausted, so that if the child is continued long thereafter on the breast or bottle to the exclusion of other food, there ensues an anemia and an arrest of development. Something like this seemed for a time to affect the Society. We believe that its being provided with free quarters delayed its growth, inasmuch as it was thus deprived of at least one incentive to initiative and enterprise.

Finally, late in 1904, the society cut loose from its old associations, and, after a brief sojourn in the building of the Young Men's Christian Association, rented a hall in the building of the St. Louis Medical Library. While the location of the hall is ideal and the contacts thus created with the medical library are mutually pleasant and advantageous, yet it was from the first evident that something better should speedily be devised, inasmuch as the hall barely accommodated the rapidly growing attendance. Soon there would not be even standing room.

In view of these undeniable facts, the society before adjourning for the summer vacation determined to build its own home, a lease for a term of ninety-nine years having been secured on the lot immediately adjoining the Medical Library building at 3525 Pine street. The society authorized its building committee to draw on the treasury to the amount of \$4,500 in order to commence the building. There will be an auditorium forty feet wide

by fifty feet long, with about 175 permanent seats, but capable of accommodating a good many more. There will be no posts to obstruct the view or mar the appearance of the interior. The walls are to be lined on the inside with buff brick, and the ceiling paneled in wood, giving at once a solid and tasteful effect. The floor will be pitched as to give each one a good view of the speaker, specimen tables, etc. There is to be a level space in front extending some feet in front of the rostrum and another back of the last tier of seats. Between these there will be a slope of six feet in thirty. Ample aisle space is provided. The committee knowing that a doctor enjoys a little physical comfort after a hard day's work, has given especial thought to the seats. These will be not only of approved construction, but ample space is to be allowed for each seat and between the rows of seats so as to avoid all crowding. To one side in front is the entrance lobby. Provision has been made for cloak rooms, lavatory, a heating plant, etc.

In all respects the hall will be one in which the society can take genuine pride. Additional funds will be necessary in order to complete and furnish the building. For the purpose of raising these funds there has been appointed a finance committee of twenty, with Dr. Robert M. Funkhouser as chairman. They will doubtless secure the needed amount within the next two or three months, so that we may hope before the snow flies to see the old society at last in a comfortable home.



# AMERICAN MEDICAL ASSOCIATION.

The Fifty-sixth Annual Session of the American Medical Association was held at Portland, Oregon, July 11th to 14th. The first general meeting was held in the Armory of the Oregon National Guards, and was called to order by the President, Dr. John H. Musser of Philadelphia, who introduced the President-elect, Dr. Lewis S. McMurtry. Dr. McMurtry then delivered his address.

The program was generally conceded to be the best thus far presented by the Association.

The scientific work was divided into twelve sections. The registration showed 1,630 members in attendance.

The hospitality of the Portland physicians will long be remembered by those in attendance. Tuesday evening a reception was given at the American Inn (Exposition grounds). Wednesday evening receptions were given by Dr. and Mrs. Wm. Jones, Dr. and Mrs. R. B. Wilson, Dr. and Mrs. Kenneth, A. J. McKenzie and Dr. and Mrs. S. M. Coe. Thursday evening the City and County Medical Society gave a reception and smoker at the Oaks. Special electric trains chartered for the occasion took the members and their friends three miles south of the city on the east bank of the Willamette river, where supper was served from 9:00 till 11:00, and a musical program rendered till midnight.

Friday four of the largest and finest passenger steamers on the river carried members of the Association and their guests up the Columbia river to the Cascades, where luncheon was served. Altogether the meeting, ex-

cept from the numerical standpoint, was a grand success.

Following is a list of the members of the Missouri State Medical Association who were registered at the Portland meeting:

Amerland, J. H., St. Louis.  
 Austin, M. B., Brunswick.  
 Beattie, T. J., Kansas City.  
 Carson, N. B., St. Louis.  
 Cooper, C. L., Kansas City.  
 Cordier, A. H., Kansas City.  
 Crowell, H. C., Kansas City.  
 Dannaker, C. A., Kansas City.  
 Dickerson, W. L., St. Louis.  
 Dorsett, W. B., St. Louis.  
 Dunlap, W. O., Sedalia.  
 Fassett, C. W., St. Joseph.  
 Fleming, A. W., St. Louis.  
 Foster, H., Kansas City.  
 Frick, W., Kansas City.  
 Gaines, J. W., Kansas City.  
 Gashwiler, J. S., Novinger.  
 Gray, M. A., Craig.  
 Griffith, J. D., Kansas City.  
 Hall, D. W., Kansas City.  
 Hall, J. R., Marshall.  
 Jacobson, H., St. Louis.  
 Kieffer, A. R., St. Louis.  
 Lippe, M. J., St. Louis.  
 Moore, W. G., St. Louis.  
 Murphy, F. E., Kansas City.  
 Nicholson, C. M., St. Louis.  
 Pierpont, J. E., Skidmore.  
 Pile, O. F., Memphis.  
 Porter, D. R., Kansas City.  
 Punton, J., Kansas City.  
 Riley, C. M., St. Louis.  
 Rowell, H., Kearney.  
 Schlueter, R. E., St. Louis.  
 Schwab, S. I., St. Louis.  
 Sloan, R. T., Kansas City.  
 Stockwell, B. E., St. Louis.  
 Tanquary, J. H., St. Louis.  
 Taussig, F. J., St. Louis.

Thrope, J. L., Jefferson City.  
Wells, H. P., St. Louis.  
Wiener, M., St. Louis.

Wilson, G. C., Nevada.  
Yates, P. C., Neosho.

OBITUARY.

DR. JAS. F. GRAVES.

Dr. James Francis Graves was born in Montgomery county, Mo., May 28, 1849; died July 4, 1905. He grew to manhood on his father's farm, receiving his education at the neighborhood school and at the State University of Missouri. He was graduated in medicine from the St. Louis Medical College in 1878. He practiced medicine in Montgomery county continuously since his graduation, and since October, 1879, he lived in Montgomery City.

Dr. Graves was a true man in every relation of life—a man who enjoyed life greatly—full of affection and sympathy and universally loved by those who knew him. He was the personification of professional integrity. Money remuneration was the least part of his pay in his professional work, for his patients loved him like a father or brother, and this was the greatest joy of his life. He had an attack of la grippe last January, from which he never fully recovered, and the depression caused by poor health was the only cause known for the tragic ending of his life by his own hand.

A truly good man is gone—one whose place in the hearts of the people in this community can never be filled.

DR. W. C. TYREE.

WHEREAS, Almighty God, in His wisdom, has chosen to pluck from our midst one of our ablest and most hon-

ored members, Dr. W. C. Tyree, while in the prime of his life, and at a time when he was enjoying the height of success in his profession; and,

WHEREAS, We realize that he was an honest, straightforward and trustworthy gentleman, not only in the practice of his specialty, but as a member of this organization of which he has served as president, as a member of the faculty of one of our leading medical colleges in which he taught for years, and as a member of the municipal council of our city; even in all public and private life; and,

WHEREAS, We consider his removal a dire loss to our society, to the profession, to the community as well as to the family; and,

WHEREAS, We, the members of the same profession, feel keenly such loss, the more, realizing that the science of medicine can deal only with health and disease, not death; therefore, be it

*Resolved*, That the Jackson County Medical Society deeply regrets the loss of this one of its most esteemed members, and regards his memory with reverence and love; ever looking backward over his life with pride in the knowledge that he was one of us, and holding out his career to our younger members as a standard for the qualities herein expressed; and be it further

*Resolved*, That we extend to his family our heartfelt sympathy for

them in their hour of sadness and loss, together with a willing proffer of assistance for them in the future; and be it further

*Resolved*, That a copy of these resolutions be spread upon the minutes of this society, a copy sent to Mrs.

Tyree and family and to the Kansas City *Medical Index* and JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

(Signed) E. L. CHAMBLISS,  
JNO. PUNTON,  
C. B. HARDIN,  
Committee.

## COUNTY SOCIETY NOTES.

### BUTLER COUNTY MEDICAL SOCIETY.

Dr. A. E. Lyle, President.  
Dr. E. N. Chastain, Secretary.

The Bates County Medical Society and The John T. Hodgen Medical Association, met in joint session in Adrian, July 6, 1905, with Dr. A. E. Lyle, president of the county society in the chair. The first part of the afternoon was given to the county society. After finishing the preliminary business a paper was read by Dr. T. F. Lockwood, of Butler, entitled, "Criminal Abortion a Prevailing Evil Against the Unborn Generation; a National Crime Committed for Mere Social Promotions." The subject brought out a very enthusiastic discussion by the following gentlemen: Drs. Gillmore, Boulware, Lyle, Colson, Whipple, Duckett and Overholser. There being no other papers to read, Dr. Gillmore presented three very interesting cases, which were examined by members present and reported to the society. They were discussed, diagnosed and treatment advised accordingly.

There being no further business to come before the meeting, adjournment was in order to meet first Thursday in August, 1905, at Spruce, in

the eastern part of the county. Dr. Colson, of Spruce, promised the society if it would meet there to furnish the doctors with a good dinner and a nice shady grove to meet in.

T. F. LOCKWOOD, Reporter.

### THE JOHN T. HODGEN MEDICAL SOCIETY.

After a few minutes' recess the John T. Hodgen Society convened, with Dr. T. H. Duckett, president, in the chair. Minutes of previous meeting were read and approved. The first paper read was by Dr. Overholser, entitled, "The Circulatory System." This proved a valuable paper and the discussion was indulged in by a majority present. Dr. T. C. Boulware read the next paper entitled, "Static Electricity as a Therapeutic Agency Briefly Considered." This paper was listened to with unusual interest. An after-supper session was held and many interesting cases were reported and discussed. A general good time was had, as is always the case when we meet at the thriving little town of Adrian, the home of our esteemed friend, Dr. Gillmore. The next meeting will be held at Nevada, first Thursday in October, 1905.

T. F. LOCKWOOD, Secretary.



## ST. LOUIS MEDICAL SOCIETY.

Dr. F. L. Henderson, President.

Dr. T. A. Hopkins, Secretary.

The St. Louis Medical Society has convened in regular session three times since June 16th. The society has voted an appropriation of \$4,500 towards building a new society auditorium. When completed the building will cost about double that amount. The amount voted is in the treasury at the present time. The ground will be broken during the summer, and it is anticipated that the new building will be completed by next fall.

At the meeting of June 17th an interesting case was presented. The patient had received an injury to his arm and cellulitis developed. Pus was found and evacuated by a long, deep incision, extending from near the elbow to the dorsum of the hand. The wound was dressed antiseptically and in a few days the infection subsided. The wound was then sutured and healing by first intention was obtained. This case was presented by Dr. J. F. Menistrina.

At the meeting held June 24th, Dr. Norvell W. Sharpe presented several pathological specimens, as follows:

"Aneurysm of the Arch of the Aorta," "Pathological Appendix," "Ovarian Cyst," "Carcinoma of the Breast," and a specimen from a case of "Spina Bifida." The specimens were interesting and came from rather perplexing cases. Discussion by Drs. Grindon, Morfitt and Funkhouser.

At the meeting of July 1st, Dr. R. M. Funkhouser was to have presented a paper on "The Limitation of Rest in the Treatment of Fractures," but owing to the great amount of business to be done, Dr. Funkhouser requested

to be allowed to defer reading the paper till some future time.

The usual time for summer adjournment has arrived, and a motion "to adjourn till called by the president next September," was made and carried.

C. H. SHUTT, Reporter.

### RALLS COUNTY MEDICAL SOCIETY.

Dr. W. L. Birney, President.

Dr. T. J. Downing, Secretary.

The Ralls County Medical Society met in regular session at Spalding Springs, July 13th, Dr. W. L. Birney in the chair. A number of physicians from Monroe county, Marion county and Pike county attended the meeting.

Dr. Fred Walter read a paper on "Hysteria." He believes hysteria is caused by a toxin of the bacterium coli commune which, under certain conditions, becomes pathogenic to the individual. He would cure these patients by using a pure culture of the bacterium coli of domestic animals. A general discussion followed the reading of the paper.

Dr. M. O. Biggs, of Pike county, read a strong paper on "Gall Stones."

Dr. E. T. Hornbach, of Marion county, read a very practical paper on "Ophthalmia Neonatorum," and Dr. Baskett, of Marion county, presented an excellent paper entitled, "Perfect Manhood from a Physical Viewpoint." These papers were very generally discussed by all the members.

The subject for general discussion was introduced by Dr. Waters, "Summer Diarrhoea in Children." Dr. Waters spoke of the pathology and etiology, and the treatment was discussed by the physicians present.

Remarks on the death of Dr. O. B. Hicklin, late president of our county society, were made by Dr. W. S. Hendrix and Dr. W. S. Harwood.

The next meeting will be held at Center, on October 12th.

T. J. DOWNING, Secretary.

### VERNON COUNTY MEDICAL SOCIETY.

Dr. H. C. Jarvis; President.

Dr. T. B. Todd, Secretary.

The Vernon County Medical Society met at Nevada on June 6th, the president, Dr. Jarvis, in the chair. After the reading of the minutes of the last meeting Dr. S. A. Johnson, of Nevada, read an interesting paper on "Digitalis." The discussion which followed was interesting and was participated in by all present.

T. B. TODD, Reporter.

### CALDWELL COUNTY MEDICAL SOCIETY.

Dr. R. K. Dodge, President.

Dr. Tinsley Brown, Secretary.

The Caldwell County Medical Society met in regular session at Hamilton on July 5th, the president, Dr. Leeper, in the chair. Three new members were admitted at this meeting, making a total membership of twenty-four in good standing.

Dr. Tinsley Brown read a paper entitled "Sudden Death During or Shortly After the Termination of Pregnancy," and reported a case. The paper was freely discussed by Drs. Waterman, Goins, Cannou, Dowell, Leeper and Eads.

Dr. Leeper, delegate to the State Medical Association, made his report. The committee appointed at

the last meeting to consider the adoption of a uniform fee bill asked for further time to make report.

Dr. R. K. Dodge, of Palo, was elected president and Dr. Tinsley Brown was re-elected secretary. The society adjourned for the summer, the next meeting to be held at Kingston, October 4th.

TINSLEY BROWN, Reporter.

### BUCHANAN COUNTY MEDICAL SOCIETY.

Dr. P. I. Leonard, President.

Dr. Chas. Wood Fassett, Secretary.

The regular meeting of the Buchanan County Medical Society was held on the evening of June 17th. Dr. O. C. Gebhart was elected to membership. On motion of Dr. Campbell the society extended an invitation to the Medical Society of the Missouri Valley to hold its semi-annual meeting in St. Joseph in March, 1906. Dr. Elam submitted an amendment to the by-laws, changing the time of meeting from Saturday night to Tuesday night.

Dr. Campbell offered a resolution deprecating the practice of printing in the newspaper the names of physicians in connection with the reports of births by the local board of health, and the secretary was authorized to communicate with the secretary of the board of health and the daily newspapers advertising them of this action on the part of the society. Adopted.

Dr. J. M. Bell read an interesting paper on "Acid Dyspepsia." Discussion by Drs. T. E. Potter, C. A. Good, O. B. Campbell and W. T. Elam. Interesting clinical cases were

reported by Drs. Jacob Geiger, T. E. Potter and W. T. Elam.

The secretary reported a healthy condition of the society, stating that but four members had been suspended for non-payment of dues, leaving seventy-one members in good standing. Dr. C. A. Good was elected official reporter for the society.

Upon motion a Symposium on Medical Education was arranged for the first meeting in September, the president and secretary being authorized to select five essayists to prepare papers.

This being the last meeting of the society before the summer vacation, adjournment was taken to the first Tuesday in September.

CHAS. WOOD FASSETT, Secretary.

#### SHELBY COUNTY MEDICAL SOCIETY.

Dr. H. C. Vaughan, President.

Dr. A. M. Wood, Secretary.

The regular meeting of the Shelby County Medical Society was held on June 13th in the office of Dr. Vaughan at Shelby. The minutes of the previous meeting were read and approved. Dr. Wood presented a case of dermatitis venenata caused by rat bane which had resisted all treatment. Drs. Smith, Pollard, Chapman, Vaughan, Owen and Dallas took part in the discussion. Dr. Dallas said he obtained the best results, in rhus poisoning, from a saturated solution of oxalic acid. Dr. Pollard said he found hyposulphite of soda effective in most cases.

The president was empowered to take steps necessary to prohibit illegal practice in Shelby County. A

committee was appointed to report upon the best methods to increase the fees for night work. The society adjourned for the summer and the next meeting will be held in September. After adjournment the members were entertained with refreshments.

A. M. Wood, Reporter.

#### STODDARD COUNTY MEDICAL SOCIETY.

Dr. D. R. Corbin, President.

Dr. Jno. Ashley, Secretary.

The Stoddard County Medical Society met in regular session at K. of P. hall, Bloomfield, Wednesday evening, June 21st. Meeting was called to order by the president. Minutes of previous meeting were read and approved. Members present were D. R. Corbin, T. C. Allen, S. M. Evans, John Douglas, J. L. Slaydon, E. Phillips, T. B. Turnbaugh, H. S. Winters, T. B. Wingo and Geo. Vernon.

Several of the members reported their delinquent lists and the secretary was ordered to have the same arranged alphabetically for the use of the members.

Dr. Wingo, chairman of committee on medical legislation, reported that it was the intention of the committee to go before the grand jury at its next session and have all physicians summoned to appear and inform that body of all irregular practice in their territory, including midwives, counter prescribing, etc.

Dr. Vernon presented a paper on "Catarrhal Fever with Malarial Complications." The subject was presented from a physiological standpoint, giving the various steps of deviation from the normal and sug-



gested the therapeutic means of treatment.

Dr. Allen, of Bernie, reported a case of malarial œdema of the brain and cord. This case and Dr. Vernon's paper were fully discussed by all present. It was the consensus of opinion that as the country was cleared and drained we saw less of malaria, and particularly of the pernicious type.

Dr. J. L. Slaydon presented two very interesting cases of puerperal infection which elicited a lively discussion covering the ground of auto-infection and the various modes of septic infection.

Dr. John Ashley presented the subject of "Summer Diarrhœas" in an able manner, dwelling largely on our defective hygiene as a causative factor and outlined the symptomatic treatment which he had found most successful in combating this scourge of infants.

By invitation of Dr. T. C. Allen, of Bernie, the society voted to meet at Bernie the first Wednesday in September. The doctor promised to present for discussion at this meeting the subject of "Watermelon with Samples."

Notwithstanding the lateness of the hour of adjournment the society was called to the banquet room where refreshments were served by the Bloomfield doctors, their wives and daughters. GEO. W. VERNON, M. D.,  
Reporter.

#### CASS COUNTY MEDICAL SOCIETY.

Dr. R. D. Ramey, President.  
Dr. J. S. Triplett, Secretary.

The Cass County Medical Society met in regular monthly session July

6, at Harrisonville, Dr. R. D. Ramey, president, in the chair. Three papers were read and discussed as follows:

1. "The Sympathetic Nervous System," by Dr. B. E. Dawson; discussion by Drs. Brierly, Triplett, Schoor, Scott and Crawford.

2. "The Tonsil; Some of Its Diseases and their Treatment," by Dr. H. S. Crawford; discussion by Drs. Brierly, Triplett, Dawson, Schoor and Ramey.

3. "Carbide of Calcium in Uterine Cancer," by Dr. E. Schoor. A quiz on "Anatomy of the Ischio-Rectal Region." "Classification of Hemorrhoids and their Treatment," was conducted by Dr. J. N. Scott.

This was a very interesting and profitable meeting and the members are becoming more enthusiastic in the work.

The next meeting will be at Harrisonville, August 3, 1905.

J. S. TRIPLETT, Reporter.

#### CHARITON COUNTY MEDICAL SOCIETY.

Dr. H. C. Tatum, President.  
Dr. C. A. Jennings, Secretary.

Chariton County Medical Society met in regular session June 29th, at 1:30 P. M., eleven members being present. The minutes of the last meeting were read and approved.

Dr. Tatum presented a patient—a negro child three years old. The committee appointed to examine the case reported it as infantile paralysis of syphilitic origin. Treatment recommended was potas. iodide and tonics.

Dr. A. W. Zilman read a very interesting paper on "Biliary Calculi," and reported four cases operated upon successfully.

Altogether, this meeting was one of unusual interest and profit.

The next meeting will be held at Salisbury, on July 27th, at 1:30 P. M.  
W. L. BAKER, Reporter.

### NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. L. Lamson, President.  
Dr. Horace Bowers, Secretary.

The Newton County Medical Society met in the court rooms at Neosho, July 11th, nine members being present. One new member was admitted at this meeting, making a total membership of twenty-three.

Some clinical cases were presented by members of the society, and papers were read by Dr. W. D. Brown, of Newtonia, on "Tuberculosis," and Dr. Porter, of Seneca, on "Typhoid Fever." Interesting discussions followed, in which all members took part.

HORACE BOWERS, Secretary.

### PULASKI COUNTY MEDICAL SOCIETY.

Dr. W. L. Ragan, President.  
Dr. G. W. Orrick, Secretary.

The physicians of Pulaski county met at Richland, on May 11th, and organized the Pulaski County Medical Society. Those present were Drs. W. L. Ragan, E. A. Oliver, Geo. W. Thume, H. C. Murphy, of Richland; G. W. Orrick, N. J. Stebbins, of Crocker; R. F. Harrison, M. F. Rolens, W. C. Carter, of Dixon. The officers elected were as follows:

President, Dr. W. L. Ragan; vice-president, Dr. R. F. Harrison; secretary-treasurer, Dr. G. W. Orrick.

The constitution and by-laws

adopted were in harmony with the constitution and by-laws of the State Medical Association.

Censors elected were: Dr. L. Tice, one year; Dr. Rolens, two years; Dr. Murphy, three years.

Dr. Harrison was appointed delegate to the meeting of the State Association at Excelsior Springs.

It was decided to hold meetings quarterly, the next meeting to be at Crocker, on the first Monday in August. At that meeting Dr. Orrick will read a paper on "Appendicitis," and Dr. Carter will read a paper on "Typhoid Fever."

G. W. ORRICK, Reporter.

### HOLT COUNTY MEDICAL SOCIETY.

Dr. C. L. Evans, President.  
Dr. J. F. Chandler, Secretary.

The Holt County Medical Society held the regular quarterly meeting at the court house in Oregon on July 6th, and after transacting the usual routine business, elected officers for the ensuing term as follows: Dr. C. L. Evans, Oregon, president; Dr. Ira Williams, Maitland, vice-president; Dr. J. F. Chandler, Forest City, secretary and reporter; Dr. S. N. Aiken, Oregon, Treasurer. Dr. Evans succeeds Dr. Quigley as president, and Dr. Williams succeeds Dr. Bullock as vice-president. Dr. Chandler was re-elected secretary and also elected reporter. Dr. Aiken succeeds himself as treasurer.

While the attendance was not so large as usual, the more active members of the county were in attendance and the meeting was the best since the organization of the society.

Owing to the inability of some of the members on the program to attend, there were but two papers presented, viz: Dr. Williams, a paper on "Cephalhæmatomata," and Dr. J. M. Davis, a paper on "Abortion."

In his report of a case Dr. Williams called the attention of the society to extreme jaundice and the eruption along the spine of the infant, both of which disappeared quickly on opening the tumor and removing the contents.

Dr. Davis in his paper on abortion took up its many phases and offered suggestions as to how physicians could do much to stop the practice whereby so many lives are endangered.

The next meeting will be held at Biglow October 5th.

J. F. CHANDLER, Reporter.

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#### LAFAYETTE COUNTY MEDICAL SOCIETY.

Dr. P. S. Fulkerson, President.

Dr. C. T. Ryland, Secretary.

A regular meeting of the Lafayette County Medical Society was held at Higginsville, July 11th. Owing to bad weather the attendance was small. Two new members were voted in, making our number eighteen. Three new applications for membership were received, which were referred to the committee.

The secretary was instructed to examine the county records and report to the State Board of Health the names of all unregistered physicians practicing in the county. The society was informed that a woman was going over the county armed with speculum and probe, claiming to be an expert

in the treatment of all female diseases. This fact the secretary was also instructed to report to the State Board of Health.

After our business was disposed of, Dr. W. A. Braecklein read a very interesting paper on the "Treatment of Cystitis," which was discussed by all present. Dr. Ryland made an extemporaneous report of a case of cystitis of very unusual cause. This case is still under treatment, and a further report will be made later.

Interest in the society seems to be increasing, and in the course of time we hope to enroll every reputable physician in the county. The next meeting will be held in Lexington, on the second Tuesday in September.

C. T. RYLAND, Secretary.

#### DUNKLIN COUNTY MEDICAL SOCIETY.

Dr. N. F. Kelly, President.

Dr. G. L. Johnson, Secretary.

The Dunklin County Medical Society met in Kennett on the second Tuesday in July.

Dr. Paul Baldwin reported four surgical cases, two being injuries of the skull, one of fracture of the nose and bones of the face, and one a case of "hatpin in the penis." Dr. Johnson reported a case of hemateme-sis which was readily controlled by hypodermic injections of ergotole. Dr. Rigdon reported a case of cystitis. All of the members present took part in the discussion of the cases.

By a vote the time of meeting was changed from the first to the second Tuesday in each month—the next regular meeting to be held in Senath, on the second Tuesday in August.

G. L. JOHNSON, Secretary.



### CARTER-SHANON MEDICAL SOCIETY.

Dr. Frank Hyde, President.  
Dr. J. A. Chilton, Secretary.

The Carter-Shanon County (Current River) Medical Society met at Birchtree June 20th, Dr. Frank Hyde in the chair. There were present seven physicians, as follows: Drs. Frank Hyde, T. A. Baltz, C. R. Hestler, T. W. Cotton, J. A. Chilton, P. D. Gum, and Davis.

The minutes of the previous meeting were read and approved, and certificates of membership were presented to those present.

Among the papers read and cases reported were the following: Paper, "Abortion from the Medico-Legal Aspect," Dr. Gum. This was a very interesting and well-written paper, and was freely discussed by the members present. In this paper Dr. Gum alluded to the fact that statistics regarding the number of abortions produced by a certain class of so-called doctors, "professionals" in this kind of dastardly work, were wanting and that the practice is more prevalent than might be thought. He also laid stress upon the amount of suffering from chronic diseases due to this cause. In discussing the paper, Dr. T. W. Cotton emphasized the proposition that the physician should resist every temptation to bring about an abortion under any circumstances, except where a council of physicians deemed it necessary to save the life of the mother.

Dr. Frank Hyde reported a very interesting case of general peritonitis in a girl ten years of age, due to intussusception, which succumbed on the tenth

day, a few hours after a fecal fistula had developed near the umbilicus. This case was freely discussed and many important points brought out regarding the management of such cases.

Dr. Hastler reported a case of prostatitis in a patient eighty-four years of age, which was discussed with much interest.

A lively air of enthusiasm prevailed, and it was considered one of the most successful and profitable meetings held since the society has been in existence.

The society adjourned to meet some time in August at Van Buren.

J. A. CHILTON, Reporter.

### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.  
Dr. H. Will Elders, Secretary.

The Jefferson County Medical Society held its regular monthly meeting at Festus, June 27th, ten members being present; Dr. Farrar in the chair.

Several very interesting papers were read at this meeting. Dr. Harris read a paper on "Chronic Lead Poisoning," the discussion being opened by Drs. Donnell and Pickel.

A paper on "Chorea," by Dr. Taylor, and one entitled "Chronic Malaria," by Dr. J. F. Donnell, were of general interest and freely discussed.

A demonstration of the Klebs-Loeffler bacillus was made by Mr. Pernard. He also showed cultures and growth of the bacillus.

Jefferson County Medical Society is in a flourishing condition.

H. W. ELDERS, Secretary.

### MONTGOMERY COUNTY MEDICAL SOCIETY.

Dr. J. L. Jones, President.  
Dr. W. M. Wheeler, Secretary.

Montgomery County Medical Society met in regular session, with the president, Dr. Jones, in the chair.

On presentation of application in due form two new members were elected, viz.: Dr. F. C. Kollmeyer and Dr. B. F. Holcomb.

Dr. D. O. Hudson was elected vice-president.

Dr. Jones, delegate to the State Association meeting, made a verbal report of the work of the Association at the Excelsior Springs meeting.

The papers which had been prepared for this meeting were postponed in favor of a clinic of cases, a number of which were presented, examined and discussed by all present.

The next meeting will be held on August 18th.

### CLAY COUNTY MEDICAL SOCIETY.

Dr. L. J. Jones, President.  
Dr. F. H. Matthews, Secretary.

The Clay County Medical Society held its regular monthly meeting in Liberty, Monday, July 26th.

Dr. F. H. Matthews read a paper on the subject of "Intestinal Catarrh," which elicited a free discussion.

A very interesting discussion of "Cerebro-Spinal Meningitis" was opened by Dr. L. J. Jones. Cases with unusual features were reported by Dr. J. T. Marsh, Dr. Calvin Atkins and Dr. C. H. Suddarth.

There were present at this meeting Drs. L. J. Jones, J. M. Allen, E. H.

Miller, J. T. Marsh, J. J. Rice, J. H. Rathwell, Calvin Atkins, C. H. Suddarth, R. E. Sevier, W. N. Cuthbertson and F. H. Matthews.

The next meeting will be held in Excelsior Springs, Monday, July 31st.

F. H. MATTHEWS, Reporter.

### JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robt. T. Sloan, President.  
Dr. Max Goldman, Secretary.

The Jackson County Medical Society held its regular meeting June 8th, Dr. C. J. Morrow in the chair in the absence of the president.

The scientific program consisted of two papers on subjects of interest to the general practitioner, one, by Dr. E. G. Mark, on "Stricture of the Urethra," the other by Dr. G. E. Bellows, entitled "The Immediate Treatment of Eye Injuries."

Dr. Mark considered the advantages of the careful use of the endoscope, particularly in locating strictures of the urethra. He gave also a brief but clear outline of the principles of his treatment. Among other things, he mentioned (1) the various procedures indicated in stricture located at different portions of the urethra, (2) the absolute necessity of drainage in the treatment, especially if there exist any degree of toxemia, and (3), perhaps most essential, the importance of performing urethrotomy only at the site of the lesion, whether located at the roof or along the sides of the canal, without unnecessarily cutting any of the healthy structure.

The following took part in the discussion: Drs. R. E. Castelaw, W. L. Campbell, J. S. Eldredge, C. S. Mer-

riman, C. F. Roberts, S. G. Burnett and C. J. Morrow. Closed by Dr. Mark.

Dr. Bellows' paper consisted of a resume of the "first aid treatment" of the more common eye injuries, such as burns, contusions, superficial and deep penetration of foreign bodies, the treatment of prolapsed iris after incised wounds, and so on. The doctor afterward reported briefly an interesting case of melanosarcoma of the eyeball, followed by rapid, fatal metastatic developments in the abdominal viscera. The paper and report were well discussed by Drs. J. S. Mott, J. H. Thompson and C. L. Burke.

#### MEETING OF JUNE 22.

At the regular meeting of the Jackson County Medical Society on June 22d the scientific program was one of more than usual interest. Dr. I. J. Wolf read a paper entitled "Some Remarks on Epidemic Cerebro-Spinal Meningitis." The subject being one about which so much has been written and concerning which apparently so little is definitely known, all who were present enjoyed the very original and instructive paper and the general discussions which followed.

The doctor at first spoke of the different causes of the disease, stating that the study of its etiology is of very great value as an aid in the use of prophylaxis against attacks. Among the predisposing causes he mentioned influenza. Little seems to be known, however, of its causation, of the method of entrance of the etiologic factor, or mode of its dissemination. The question whether the disease is contagious or infectious took up some time of the essayist.

The description of a typical case of acute meningitis and pictures of mild as well as of intensely malignant attacks then followed. In detailing the above types the essayist brought out with no slight degree of emphasis the horrible features attending every attack of the disease. He made a few remarks on the differentiation between hysteria and cerebro-spinal meningitis, and the value of lumbar puncture in arriving at a definite diagnosis. The treatment of the disease consists of prophylaxis, medicinal and dietetic measures, lumbar puncture and the administration of antitoxin. All therapeutic measures should be given a trial. The prognosis should always be guarded.

The discussion was opened by Dr. H. O. Hanawalt, who, in his remarks, laid considerable stress on the importance of differentiating between cerebro-spinal meningitis and hysteria, which in many instances may completely mask the disease. Others taking part in the discussion were Drs. John Panton, B. H. Zwart and N. A. Stevens. Dr. Wolf closed the discussion.

Dr. E. G. Mark reported a case of syphilis contracted by one individual striking another in the teeth, thereby cutting the knuckle of his right hand, at which point there developed a typical chancre, followed and accompanied by all the signs of syphilitic infection, particularly the general adenopathy with its characteristic features. A photograph of the lesion was exhibited. The condition responded happily to anti-syphilitic treatment.

At this meeting the society adjourned for the summer, to meet again in September.



New members: Dr. William Rice and Dr. C. L. Cooper, making a total membership of 235 in good standing.

MAX GOLDMAN, M. D., Sec'y.

### LIVINGSTON COUNTY MEDICAL SOCIETY.

Dr. David Gordon, President.

Dr. J. F. Cherrington, Secretary.

The regular monthly meeting of the Livingston County Medical Society was held in Chillicothe, Wednesday, June 21, 1905.

The Chillicothe members gave a twelve o'clock luncheon to the members of the society and their wives and the visiting medical men.

The session was called to order at 2 P. M. in the circuit court room, and the following program was carried out:

1st. An instructive and entertaining talk upon "Medical Legislation and Medical Ethics," by Dr. Herman E. Pearse, of Kansas City. Discussion by Dr. O. Beverly Campbell, of St. Joseph, and others.

2d. "Ectopic Gestation, with Cases," by Dr. O. B. Campbell, of St. Joseph.

This was a splendid paper, of interest to all, and was discussed by Dr. Pearse and others.

A vote of thanks was tendered Drs. Campbell and Pearse for their presence and interesting talks.

3d. "Scarlet Fever," by Dr. H. M. Grace, of Chillicothe. Discussion by Drs. J. F. Cherrington, B. N. Stevens, J. H. Winter, G. A. Gordon and G. W. Hutchison.

4th. Dr. R. H. Cabel made interesting and timely remarks upon the expediency of clinical cases rather than papers at our meetings, deeming

the cases more instructive and serving best to promote interest in our meetings.

5th. "Local Analgesis," a paper by Dr. B. N. Stevens, was well received and commended by the members for the ideas presented.

Dr. H. C. Gibson, of Moorsville, and Dr. A. J. Simpson, of Chillicothe, having complied with the requirements of the society, were duly elected to membership.

Dr. W. K. Crellin, resident of Chillicothe, and formerly a prominent physician of this county, now retired, was unanimously elected to honorary membership.

Dr. B. N. Stevens offered a resolution changing the time of meetings of the society from the third Wednesdays of each month to the second Wednesday of January, April, July and October. The resolution was laid upon the table until the July meeting.

The following were elected members of the board of censors: Dr. L. E. Tracy, three years; Dr. H. M. Grace, two years; Dr. F. P. Batdorff, one year.

On motion, the board of censors was instructed to collect all articles appearing in the county papers concerning any member of the society or his work savoring of advertising, and read the same at the next meeting following the appearance of such article, and that the member to whom it refers be permitted to explain.

The president appointed the following committee on public health and legislation: Drs. Reuben Barney, of Chillicothe; W. L. White, of Springhill, and H. N. Carver, of Chillicothe.

The secretary was instructed to act as reporter for the society to the State Association Journal.

J. F. CHERRINGTON, Reporter.

### LACLEDE COUNTY MEDICAL SOCIETY.

Dr. J. M. Billings, President.

Dr. J. A. McComb, Secretary.

The Laeledge County Medical Society met at Lebanon on July 17th, Dr. Billings presiding.

Dr. Jacobs, of Conway, read a very instructive paper on "Early Diagnosis of Tuberculosis." Two cases of tuberculosis were presented, one of some months' duration, the other in its incipency, and the members devoted considerable time to examining

the cases and comparing conditions. The discussion on Dr. Jacobs' paper was full of interest and profit. Dr. Smith, of Orla, presented a case for examination.

Dr. W. R. Lucas, of Springfield, was present as a visitor.

At the next meeting Dr. W. R. Summers, of Niangua, will read a paper on "The Early Treatment of Phthisis Pulmonalis." On motion, the by-laws were changed so that the annual election of officers will be held at the first meeting in the year, and payment of dues will be made at that time. The society will meet in future on the second Monday in January, April, July and October.

J. A. McComb, Reporter.

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## NEWS ITEMS.

**Surgical and Obstetrical Instruments for Sale.**—The surgical and obstetrical instruments of the late Dr. A. Derivaux, consisting of the most recent models, are for sale at reasonable prices. Mrs. Derivaux will furnish list of instruments and prices to applicants. Address 2723 Russell avenue, St. Louis, Mo.

**Officers American Medical Association**—The following officers were elected at the Portland meeting of the American Medical Association: President, William J. Mayo, Rochester, Minn.; First Vice-President, Brigadier-General Walter Wyman, Washington, D. C.; Second Vice-President, K. A. J. Mackenzie, Portland, Ore.; Third Vice-President, Eugene S. Talbot, Chicago; Fourth Vice-

President, Edwin D. Martin, New Orleans; General Secretary, Geo. H. Simmons, Chicago; Treasurer, Frank Billings, Chicago.

The Governor has appointed the following Commissioners for the State Sanatorium for the treatment of incipient tuberculosis: Dr. W. M. Bayless, Macon; Dr. J. L. Eaton, Bismarck; Dr. L. C. McElwee, St. Louis; W. L. Gupton, Montgomery City; W. D. Craig, Galena.

Frank Parsons Norbury, A. M., M. D., editor of the *Medical Fortnightly* and Medical Superintendent of Maplewood Sanatorium, Jacksonville, Illinois, has accepted the Chair of Nervous and Mental Diseases, Keokuk Medical College.

# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	G. W. Lott	Ulesboro	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Kenoma.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas W Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	C. C. Leeper	Braymer	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	E. P. Potterfield	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Charlton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Platte City.
Cole	J. P. North	Jefferson City	G. Etmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	R. S. Holman	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	J. A. Asher	Trenton	W. D. Fulkerson	Trenton.
Henry	Jno. H. Britts	Clinton	F. M. Douglas	Clinton.
Holt	B. T. Quigley	Mound City	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	S. S. Brown	Edina	Henry J. Jurgen	Edina.
Laclede	I. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	E. S. Smith	Macon	G. B. Rush	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmore	Princeton	R. Buren	Princeton.
Miller	S. P. Hickman	Uman	G. D. Walker	Eldon.
Mississippi	A. J. Martin	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	I. W. Lamson	Neosho	Horace Bowers	Neosho.
Nodaway	J. A. Larrabee	Barnard	F. R. Anthony	Maryville.
Pemiscot	D. B. Crowe	Caruthersville	F. G. Luten	Caruthersville.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
Phelps	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Quick	Crocker.
Putnam	C. H. Carryer	Hartford	T. A. Townsend	Unionville.
Ralls	O. B. Hicklin	New London	T. J. Downing	New London.
Randolph	G. O. Cuppnidge	Moberly	W. M. Dickerson	Renick.
Ray	Chas. R. Shotwell	Richmond	L. D. Greene	Richmond.
Reynolds	I. M. Lowery	Centerville	T. W. Chilton	Corridon.
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	A. A. Gossow	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	H. C. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	J. C. Kessenger	Milan	J. S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City.
Washington	J. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	L. M. Pettit	Greenville	I. N. Barnett	Piedmont.



# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Monthly. Second Tuesday.
Carter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday, April, July, October, January.
Davies .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. First Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Monthly.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Henry .....	Monthly. Second Tuesday.
Holt .....	Quarterly. January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Semi-Annually. First Mondays May and November.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Monthly. First Wednesday.
Macon .....	Monthly. On or before full moon, Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Moniteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Monthly.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.

President-Elect: WM. J. MAYO, Rochester, Minn.

President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

President: D. C. GORE, Marshall, Mo.

Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, Laclede; F. A. GLASGOW, St. Louis; T. F.

LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

## COMMITTEES.

### Committee on Scientific Work.

C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.

### Publication Committee.

C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes; W. B. Dorsett.

### Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, Lewis.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Fayetteville. Counties: Clay, Ray, Platte, Clinton, Caldwell, DeKalb, Gentry, Harrison, Worth, Daviess.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: Bollinger, Scott, Madison, Cape Girardeau.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Hickory, Cooper.

Fourteenth District.—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Dade, Barton, Cedar, Vernon.

Sixteenth District.—R. L. Johnson, Rolla. Counties: Dallas, Crawford, Phelps, Pulaski, Laclede, Dent.

Seventeenth District.—J. E. Tefft, Springfield. Counties: Greene, Christian, Stone, Barry, Lawrence, Webster, Polk, Taney.

Eighteenth District.—H. C. Shuttee, West Plains. Counties: Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

\*Counties in black type are unorganized.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

VOLUME II.

SEPTEMBER.

NUMBER 3

## ORIGINAL ARTICLES.

### THE PRESENT STATUS OF ORTHOPEDIC SURGERY.\*

BY A. J. STEELE, M. D., St. Louis.

The spring of 1876 was the first time I read before this association a paper on "Orthopedics." That was many years ago. The subject of the paper was "Torticollis." On the following year I presented a paper on "Pseudo-Hypertrophic Paralysis," being one of the earliest papers published on that subject in this country. It was commented on by Hammond in his text-book issued about that time. In the following twelve months Pott's disease received attention. From time to time since then I have been in touch with the association, presenting it with occasional thoughts on Orthopedic subjects.

As, on the one hand, I peruse those early papers, and on the other, note where we stand to-day on the same and kindred topics, I realize what advanced strides have been taken in this department; while commendable advance has been made in all depart-

ments of medicine and surgery, yet in none more so than in this. Views on pathology and on methods of treatment have undergone radical changes, and, too, the scope of this department has been greatly enlarged. It was limited, in my student days, to the consideration of certain congenital deformities, like club-foot; and acquired deformities, such as bow-legs and other sequences of rickets; and to lateral curvature and wry-neck. But the progressive American mind soon said, why stop with these deformities? If a local tuberculosis, or, as it used to be called, scrofula, or struma, causes a hump-back or a lame leg, it too should be treated, for the prevention is more than the cure. So, thanks to Dr. Sayre, (who, by the way, occupied the first chair of orthopedic surgery in this country, and, unless I am misinformed, the present essayist filled the second) all tuberculous joints were included in this specialty, because, unless arrested, they became deform-

\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.



ing. Coming down a few years later, the question was asked, why limit our studies and practice to the tuberculous articulations? So another large field was opened in the consideration of other chronic articular diseases, of which there were many. But, if diseased joints were to be included in orthopedics, why not then articulations impaired from any cause, as from dislocation, whether congenital or acquired? And, also, minor affections in the neighborhood of joints, as of bursitis, ganglion, etc.? As articular troubles of the lower extremities caused lameness, then it was a short step to include limping, howsoever induced, as of coxa vara, or paralysis, thus opening up an additionally large field. Club-foot had always been relegated to this department; but why not all subcutaneous affections of the feet, such as a broken down lateral arch, producing flat-foot, or an anterior transverse arch, metatarsalgia, hallux valgus, over-riding, hammer toes, etc.?

Seventeen years ago, when the American Orthopedic Association was organized, I, as a charter member, urged that our specialty should be defined, its scope indicated and its limits fixed. But the eastern men fought shy of the proposition, would not be committed. Perhaps in casting their horoscope of the future of this department, they saw rich, but as yet uncultivated fields of research, and thus cared not to be cribbed. Impaired locomotion from any cause was ours to consider. Thus the paralysis claimed attention, and the neurological domain was invaded, and the end is not yet. In the early day our

armamentarium consisted of splints, and a great amount of commendable ingenuity was displayed in their manufacture. Not many years since a colleague in all seriousness dubbed me a "splint doctor," and he was right, but I was more than that.

The tendo achilles was early recognized as the hindrance to the correction of club-foot. It was natural therefore that the orthopedist essayed to divide it. So he cut down upon it from without, but the few cases doing badly, the operation fell into desuetude, until Stromeyer in 1831 conceived the idea of dividing it under the skin. This being put into practice, subcutaneous surgery took birth, a great boon, and thus a new era was opened to orthopedic surgery. Mr. Little, an English surgeon, himself a sufferer from talipes, visited and was successfully operated upon, by the German surgeon. Mr. Little introduced the procedure to his own countrymen and became the father of English orthopedic surgery. Twenty-two years ago, armed with a kind letter of introduction from my teacher, Frank H. Hamilton, of New York. I was cordially received and entertained by Mr. Little at his cosy home near Hyde Park, London. He was a typical, genial country gentleman of the old school. The memory of that visit remains a green oasis in my life, and it gave new zest to my orthopedic studies.

For many years subcutaneous tenotomy was the only operation essayed by the orthopedist. But our department was not slow in profiting by the advances and discoveries being made in modern general surgery. Anesthesia, antiseptics, surgical cleanliness

were all appropriated, so that to-day one-third of our cases at least come under the knife's sway. Even the knee, the largest joint in the body, is opened with impunity, though sharing as it does, the danger equally with the peritoneum, of infection.

As a recognized specialty, our department has been of slow growth. Twenty-three years ago, when I renounced general practice, nine-tenths of the profession were ignorant of the meaning of the term "orthopedics," so much so that in order not to be misunderstood as to what my department included, I styled it, "Deformities and Chronic Joint Diseases." Now, happily, even the public are beginning to understand the meaning of the term.

Another cause for its slow growth as a paying specialty is the opportunity it affords for rampant quackery. No other department is so capable of appealing to a gullible public through pictorial illustrations as this. 'Tis said the most beautiful example of the limner's art is found in the representation of the perfected human form, but distort this, as is found in congenital and acquired deformities, and sympathy is at once aroused, though the object may be repellant. Advantage is taken of this by the advertising quacks. Their circulars are picture-galleries of deformed humanity, and of "crooked things made straight;" the "before and after." The positive promise of cure; the lying testimonials; the securing large payments in advance; the show of machinery and of polished apparatus; the subsidizing of country newspapers; the traveling drummers and individual correspondence pushed re-

lentlessly, all help to draw the innocent sufferer into the nets of these unprincipled charlatans.

In many cases this could have been prevented had the family physician, who was duly consulted, been fully aware of the ignorance and baseness of the human vampires whose finished work often finds visible expression in the so-called surgical and orthopedic institutes, and equally bad cult osteopathy.

Naturally, parents want their children well, and when stricken with disease, call the physician to aid in their recovery; but for them to realize that a child is to go through life maimed, crippled, deformed, it so appeals to their sympathy and love that no sacrifice is too great in the effort to cure and relieve. So they become an easy prey to the advertising charlatan who promises cure and restoration of form and function. And especially is the determination of the parent to effect a cure great, if he believes that he may be responsible, directly or remotely, for the congenital physical deformity or incapacity of his offspring.

There flourish to-day in many of our western cities so-called surgical and orthopedic institutes, advertising the cure of, and essaying the impossible in the treatment of disease and deformity. The eastern cities were once afflicted with these vampires, preying on human credulity, but as their ignorance and questionable methods and failures became known to the profession at large, and to an educated public, their patronage ceased and they removed to pastures new and unharvested. So will it be at the west; their days will be limited, when

the profession and public know on the one hand of the quackish methods and incompetency of these charlatans, and on the other that there are educated physicians of the regular profession who honestly and conscientiously treat this class of cases.

The greatest accession of late made to orthopedic surgery has been the utilization of the x-ray, especially in diagnosis—more so probably in this than in any other department. Shadowgraphy finds expression in the condition of the densest of organic structures, namely, the bones, and in their relations to one another; so, being familiar with the normal appearance, we are able to determine the abnormal as to density, size and internal structural change. The tubercular joint early gives evidence of bone atrophy, and the diminished shadow indicates a lessening of the lime salts, and the focus of disease appears as a thin walled cavity. Later, irritation of the joint stimulates epiphyseal growth, which enlargement will be noted on the plate. Destruction of bone is indicated by diminished shadow and indistinct outlines. A differential diagnosis can be made between this tuberculous process and osteomyelitis. The latter does not involve the joint, at least in the early stage; there is no atrophy of the shaft, on the contrary, there is a thickening of the bone cortex, a cavity, and positive localization. Other forms of osteomyelitis throw characteristic shadows which could not well be confounded with local tuberculosis.\*

The x-ray has been of great practical value in clearing up the pathology

\*Robert S. Osgood.

of arthritis deformans, as the Germans term it, showing two distinct conditions, so that the explanatory terms, atrophic and hypertrophic arthritis, will hereafter be used, in lieu even of osteo-arthritis and rheumatoid arthritis. No longer can the sweeping term chronic rheumatism, be applied to these deforming, slowly progressing arthritic troubles, heretofore a cloak for ignorance. No longer will the old Texas doctor tell us that his remedy for cases of chronic rheumatism is to "take them out on the plains and shoot them."

The relation of the fragments in fractures and of the involved bones in dislocations, is now removed from the field of guesswork. Improved therapeutics and better results will accompany the positive diagnosis of the x-ray. It is often a satisfaction to have positively verified conclusions already arrived at by manipulation. I would have attempted reduction in two cases of double congenital hip dislocation had not the skiagraphic pictures in the one case demonstrated new formed joints on the dorsum ilii, and in the other, fragile femoral necks only wanting slight force to break them. Thus I was saved from disappointing failure and serious complications.

A little fellow with hip disease, several months recumbent on the stretcher-splint, with traction, was doing finely. So I allowed him to be taken to his father, a physician in the Indian Territory. Two months later he wrote, "Boy so well and active, and limb in such perfect position, must be gotten up." I reluctantly consented, even against my better judgment, and I sent down a Thomas



splint, with high shoe and crutches. At the end of another two months word came, "Limb much shortened, foot everted, hip painful, severe night cries, disinclined to move." I telegraphed, "Bring him at once." What had happened to again light up the disease? What was the condition of the parts? Let us hear the story of the skiagraph: Destruction of the upper part of the acetabulum, with dislocation on the dorsum ilii of the head. We had always suspected disease of the acetabulum rather than of head and neck of femur, because the pain had been located in the hip rather than at the knee. The lesson taught was, keep your cases well in your own hands, trusting no one else. The boy was again put back on his stretcher with elastic traction. The hip duly came down, and will be so held for ankylosis, but in good length and position. The patient was gotten up too soon, and had carelessly been allowed to bear weight on the limb, and thus recovery was put back many months. But it proves the value of the information conveyed by the x-ray.

Every week we are having illustration of the practical value of the Roentgen ray. The machine has become part of the furniture of every surgeon's office. But to be of practical benefit in the recognition of disease, or abnormal conditions, the operator must know the normal.

I have proposed to our instructor in osteology at the college to have a cabinet of skiagraphic pictures of the various bones and joints, of the extremities and of different ages, for study and for the instruction of the student.

We should speak of the novel ex-

pedients employed to relieve the subjects of paralysis in the surgical procedures of tendon transplantation and nerve grafting. Up to the present time we have had but two suggestions for these helpless ones, viz.: (1) arthrodesis, or the production of true ankylosis, especially where the joint was flail like—mostly in the ankle; and (2) the use of complicated braces, hugging the limb closely, and fitted with lock and stop joints, and frequently with the additional employment of crutches. The use of brace and crutches was a temporary makeshift. The arthrodesis in connection with this switching of the power of a normal muscle to the tendon of a paralyzed one; this conversion of a flexor into an extensor, or of an abductor into an evtor was a marvelous idea, and, happily, has found practical application. The operator should be well up in his anatomy, have correct ideas as to the force and power of the muscles and direction of their pull, and of their tension, and the thoroughness of the attachment; the immobilization of the part until union is complete, and, later, the active and passive movements. The operation should previously have been well mapped out and perfected in every detail. While there has been much of disappointment, yet brilliant results have not infrequently been attained, and the lame made to walk, and the palsied hand to raise.

The more wonderful procedure of nerve-grafting, or transference of nerve power, while quite possible, yet finds less frequent application. In favorable and selected cases it will in the future come into general use, thus opening a fertile field.

For the straightening of knock-kneed limbs, subcutaneous osteotomy is safe and efficient; in the opposite deformity of bow-legs, osteclasis, or the mechanically breaking of bone, is now all that can be desired.

*Pott's Disease.*—Twenty-five years ago I put myself on record as saying that hunchbacks would be as rare in the community in time to come, because of improved treatment, as pock-marked visages were nowadays to what they were sixty years ago; and it has proved to be true, and while we may not break and straighten an old spinal boss, yet we may, by early and supporting treatment, prevent deformity on the one hand and diminish it on the other. Recumbency is the keynote in the therapeutics of tuberculous spondylitis. This removes the superincumbent weight, and in conjunction with a brace or jacket, best made of celluloid, to immobilize the vertebræ, arrests the disease and prevents deformity.

*Congenital Dislocation of the Hip.*—At the Pertle Springs meeting of this Association, held in 1892, a little girl was brought in for diagnosis. She had always been lame, and there existed extreme lordosis. Opinion of spinal trouble had been given. I was able readily to demonstrate the case as one of double congenital hip dislocation; and later it fell into my hands for treatment. Following the example of Dr. Buckminster Brown, of Boston, who had then recently reported a case successfully treated by long continued traction, I put her on the back, with five to eight pounds to each limb. How faithfully for many, many months, we kept up a constant pull on the hips, and when finally she

was gotten up, we were careful to throw the weight on the tuber ischii, and not on the hips. It was the opinion of counsel that we had succeeded in reduction; perhaps we had. But a doubting grandmother, with whom she was visiting, removed the brace, thus allowing unrestricted weight and motion. So the heads slipped out, if really they had been in. The child was greatly improved but not cured. I now realize that the femoral head was on the edge of the acetabulum for months, waiting only for slight abduction and rotation to lift it into its socket. But oh! place me back again with my x-ray and present knowledge and experience, then would be given a positive assurance of cure. Such have been the advances made in our knowledge of the anatomy and of the treatment of congenital hip dislocations, that cases under five or six years of age are hopeful of cure. I believe in the Lorenz method of manipulation, but prefer to lessen the resistance of the contracted muscles, so far as may be by previous traction and by tenotomy of the adductors. If simple manipulation is unsuccessful, there remains the operation of opening the joint and splitting the capsular ligament, that it may not get caught between the head and the acetabulum, and that under sight the head may be replaced.

While in the past correct anatomic replacement was quite exceptional hereafter it will become the rule. What an advance!

*Fragilitas Ossium.*—We have a valuable contribution to the subject of "Fragilitas Ossium," by Dr. Nathan, of New York, in which the ground is taken that all cases coming under this



heading are congenital, only they have not been recognized at birth. Fetuses, with multiple fractures had been observed and studied, and the name of osteogenesis imperfecta given to the disease causing the same. But it had been supposed that extra-uterine existence was not possible with these cases. So there have been considered by writers on multiple fractures two classes of cases, one antenatal, and the other observed during childhood and youth. I believe Dr. Nathan is correct in considering them both one and the same. There are different degrees of intensity of this disease. When extreme and attended with many intra-uterine fractures, still-birth is the rule; but when less severe, the infant is born viable, and with care, lives. The liability is there, but during infantile life is so tenderly cared for that traumatism is avoided, until the infant is put on his feet. Then the attendant falls and knocks act as exciting causes, and the fractures occur.

*Empyema a Cause of Scoliosis.*—Some of my most extreme cases of lateral curvature of the spine have been caused by collapse of one lung following empyema. The severe and long continued pressure on the lung of the large amount of fluid contained in the pleura, has so condensed the air-vesicles that they are effaced; the opposite lung alone doing the work, the equilibrium of the chest is lost and the spine tilts laterally. Or the lung is compressed by air admitted into the pleural cavity in the operation of tapping or opening the chest. The prevention of this deformity is found in early withdrawal of the fluid, on the one hand, and

withdrawal of fluid without admission of air on the other; and here comes in the responsibility of the general surgeon.

America has taken a decided lead in the department of orthopedic surgery. Eighteen years ago a national association was formed which exists to-day with a large membership, and quarterly transactions published regularly, of such value as to be quoted freely by even foreign writers.

Did time permit, it would be interesting to consider in detail all the different topics coming within the purview of orthopedics. They can, however, be generalized as (1) deformities, both congenital and acquired; (2) chronic joint diseases in both the young and old; and (3) difficulty of locomotion from any cause. The therapeutics being both preventive and curative, may be either mechanical or operative. So, then, we stand to-day as one of the most comprehensive and progressive of the specialties.

#### DISCUSSION.

Dr. J. F. Binnie, Kansas City: It is a hard matter to follow Dr. Steele in a paper covering so wide and extended a territory. As to the width of territory occupied by orthopedics, as set forth by Dr. Steele, when he told us that if spinal curvature was due to tuberculosis (which it was), therefore orthopedics included the original disease and the prevention of the deformity, it reminded me of our friends the gynecologists, who invented the speculum for the examination of the cervix. But they did not limit it to this; they said, man is born of woman, and therefore they decided to extend its use until now they operate



on the prostate in the Women's and Children's Hospital. So it is with regard to the scope of orthopedics. There is no specialty in surgery. Each man chooses what he knows best, but there can be no hard and fast lines. Nothing has so advanced as the treatment of club-foot, and nerve suture promises much in the future. I believe before many years are over that nerve transplantation will be a comparatively common operation. It is wonderful how a flexor muscle may become adapted to perform the work of an extensor, and how a nerve, whose normal function is to shrug the shoulder, is educated to reverse the action. The paper emphasizes the importance of early diagnosis, for instance, the importance in early cases of Pott's disease of looking for some obscure indication. I remember in one case I could find no symptom until at last I found a knuckle protruding from the back. After application of a plaster of Paris bandage, the child was able to sleep well for the first time in months, and made an excellent recovery.

Dr. M. M. Edmonson, Kansas City:—There is one feature in the treatment of cases in the orthopedic line that is of interest. It being an acknowledged fact that the majority of joint diseases are due to tubercular disease, then the same conditions that will bring about a cure in pulmonary tuberculosis will aid in these cases. In the Mercy hospital during the past winter, where we treated only orthopedic cases, none of the

cases did so well as during the summer and I am convinced that aside from the protection of the joint we are greatly aided by an outdoor life, just as in pulmonary tuberculosis. There was one case of congenital dislocation of the left hip which was reduced by the Lorenz method. It was put up in plaster of Paris, strongly abducted and flexed. The x-ray showed that the right hip was dislocated although physical examination showed no sign of dislocation. The left hip was brought down on a line with the right, the support was taken off a month ago and passive motion instituted in the left hip and the child now walks almost perfectly.

Dr. Steele, in closing: Two of the pictures I present show congenital dislocation of the hip reduced. The single one was reduced about a year ago, and to-day the child is running about perfectly well. The other was a case of double dislocation which Lorenz refused to operate on. I took the child in hand and permanent anatomic replacement is the result. I am treating the tuberculous joints out of doors, but where there is an inflamed joint it must be kept perfectly quiet. Dr. Binnie, as a general surgeon, is, I suppose, simply jealous of the gynecologist and the orthopedist. But never fear, the field is large enough for all of us. I have not had time to speak of spinal supports. Formerly I made them of leather, but now of celluloid, and find them to be very light and satisfactory.

## PERMANENT SEQUELÆ OF INFLUENZA.\*

BY L. W. DALLAS, M. D., Hunnewell, Mo.

The etiology and symptomatology of influenza are sufficiently well known to require no description. The treatment, however, is most important and unfortunately is described, more or less accurately, by the word polytherapy.

Of all overtreated diseases with which we are occupied—and there are many—influenza is a sure winner. Yet many times it is not treated at all, leaving the toxins of the disease to lay the foundation for many serious troubles in after life.

The laity many times ignore the milder cases which call for skilled treatment, and frequently the home treatment, or lack of treatment, proves the undoing of the patient. It is also a notable fact that some of these milder cases leave a train of evil consequences which render the patient a more or less complete physical wreck for the remainder of his life, and his days thereby shortened.

It is a common experience with the average practitioner to find many persons dying from other diseases, who date their first ill-health from an attack of influenza.

I propose to discuss briefly the more common complications and sequelæ of this disease in the hope of calling attention to its great importance.

The majority of the disastrous after-effects of this disease, which I shall enumerate, have been observed in a general practice of some fourteen

years' duration. The remainder have been gleaned from various text-books and medical journals. No attempt will be made to discuss the pathology of these sequelæ in detail; it will be assumed that nearly all—if not all—of the after-effects of influenza are caused by degenerative changes, which result from the toxins produced by the bacillus of Pfeiffer. It will be well to remember that some of the most dire consequences may be caused by mixed infections, in which the grip bacillus plays a leading and, in some cases, a subordinate part.

One of the most serious sequels of grip is its effect upon the respiratory mucous membrane. Many catarrhal troubles of a permanent character are caused by this disease. Starting with the nose, there is no mucous cavity or surface which it may not invade and there locate to stay. Chronic rhinitis, pharyngitis, laryngitis and bronchitis are noted.

Tuberculosis is a frequent follower of grip where there is a predisposition to that disease. Abscess of the lung has been noted with various complications. Pleurisy followed by empyæmia, thickening and agglutination of pleural surfaces, thereby permanently crippling the lung, is a recent experience.

The circulatory system is a special sufferer. Tachycardia, bradycardia, angina pectoris are occasionally seen. Cardiac dilatation is more frequent, but the most frequent and pronounced, is a general cardiac weakness, which produces, in very many cases, profound prostration of all the powers and

\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

forces of vital organs. This leads to many serious difficulties of the circulatory system, which are too apparent to need mention in a paper of this kind.

Rarely nephritis is a sequel of grip and lasts the remainder of the hapless patient's life. More frequently cystitis of a catarrhal character is seen, requiring good management to prevent its becoming chronic.

The nervous system is a frequent sufferer from grip and may result from cardiac asthenia, as noted above.

Insomnia, general neuralgia, migraine, melancholia, mania, myelitis and meningitis have all been observed. Vertigo of nervous origin I have noted in three cases.

The organs of special sense suffer by reason of degenerative changes in the nerves of special sense.

One writer has noted a case of blindness caused by optic neuritis following grip. Paresis of the optic nerve seems to produce the more common eye troubles. Permanent deafness may be caused by suppurative processes in the middle ear, as well as by paresis of the auditory nerves.

In some cases vaso-motor disturbances, causing profuse sweats, persisted for months, bringing about neurasthenia of a severe type.

I have recently seen a case of brachial neuritis, which was very likely caused by influenza, and which has persisted for the past year. I now have a case of hemiplegia under observation which has been seriously aggravated by grip. I saw a case of partial aphasia and mental aberration in an old man who, during his sickness, became maniacal and wandered from his home. Mental despondency

has been observed by myself and reported by others.

Gastrointestinal effects are frequently seen, and may be in the form of gastric catarrh, lack of motor power and general weakness of digestive function. The intestinal after effects are more often catarrh and lack of motor power, thereby producing constipation of a permanent character. Chronic appendicitis has been caused by the bacillus of Pfeiffer.

Degenerative changes in the uterus frequently produce abortion, and sometimes establish an abortion habit.

#### DISCUSSION.

Dr. J. M. Allen, of Liberty: There has not been, and there will not be, a paper read of greater importance to the medical profession in their relations to treatment of disease than the one read by Dr. L. W. Dallas on the sequelæ of la grippe. The doctor has correctly selected that element which is of the greatest importance in the disease under consideration. La grippe of itself, except when complicated with other diseases, is simple, and we have remedies that relieve it in a very short time. The sequelæ, however, are often very grave and dangerous conditions. That these sequelæ are the result of toxines affecting some one organ of the body there can be no question. In this selection there is no fixed law. Hence I believe that the selection is governed by the peculiarity of the individual. Therefore, any of the organs of the body are liable to be involved.

In an analysis of a large number of cases of sequelæ of grip seen at my clinic in the University Medical College, Kansas City, Missouri, I find that



the organs affected are in the following order of frequency: Heart, lungs, kidneys, nerve centers, muscular system and liver. The liver affections are largely confined to its ducts. When the lungs are involved in the primary attack the inflammation most frequently begins with the pleura and extends in the connective tissue of the lung, rarely involving the mucous membrane of the bronchioles and air cells. Hence the classic symptom of pneumonia (rusty colored sputum) is absent. Also, in many cases, there is no bronchial breathing for the same pathological reason. In many cases the inflammatory process advances steadily, not unlike an erysipelas of the skin.

From observations drawn from my private practice and my clinic at the University Medical College, where I examine three thousand to four thousand cases annually, excepting the cases of la grippe uncomplicated in the primary attack, it runs its course from seven to twelve days, and, if properly treated, sequelæ are rare. If, during this period, the patient does not stay in doors and exposes himself to the vicissitudes of the weather, sequelæ are very frequent. My clinic in the University Medical College is a so-called out-door clinic, composed of the indigent and poor of the city, who are compelled to go to work as soon as they can walk. Hence the large percentage of sequelæ of grip in our cities. It is not near so large in the country. I am sure I do not say too much when I say that 75 per cent. of all the cases I have seen of phthisis, disease of the heart, kidneys, lungs and nerve centers, in the last ten years, could be easily

traced as a result of grip due to exposure.

Dr. L. J. Dandurant, of St. Joseph:—I think appendicitis is attributed to grip, because we do not know what else to attribute it to. It is true we do have a great many more cases diagnosed and operated upon now than formerly, and as la grippe made its appearance just about the time that the average physician was beginning to recognize appendicitis, some surgeons are disposed to lay the whole responsibility upon this disease. I recently read some very interesting statistics showing that since appendicitis has been diagnosed by the average physician the different diseases of the abdomen, especially those attributed to the liver and stomach have decreased in proportion to the increase in the number of cases of appendicitis. While I do not mean to say that la grippe is never a cause of appendicitis, I am inclined to believe that the great increase in the number of cases is due to the correct diagnoses, and not to the recent epidemic of la grippe.

Dr. T. E. Potter, of St. Joseph: Chronic appendicitis having been referred to as one of the things that come about as the result of this trouble, I would say that I am convinced that a large number of the acute cases of appendicitis are the result of influenza. I myself practiced medicine for sixteen years, and in that time I had only one case of appendicitis, the result of an enterolith. Since the epidemic of grip, fourteen years ago, we have had nothing but appendicitis. We have had it all over the country, and the countries that have suffered the most from influenza

have had the most patients suffering from appendicitis. Take Moscow, for example, where the cases of influenza were so numerous, and where so many cases of appendicitis have been reported. We have had this winter many cases of the so-called winter cholera, and this little appendix is a favorable element for the cultivation of these little germs. We find that influenza appears in the history of 90 per cent. of the cases of appendicitis we have to deal with. Since this epidemic of fourteen years ago, we have found many more cases coming up the summer following a winter in which there has been an unusually large number of cases of grip.

Dr. Roland Hill, of St. Louis: I think the wide and diverse influence of the grip bacillus has not been fully appreciated. Some three years ago I reported a case of grip peritonitis, and I think I can prove to the satisfaction of the meeting, that it was grip peritonitis. The patient, a young woman of twenty-eight, was taken with a severe headache on Wednesday, with a slight cough and a slight rise in temperature. Thursday the conditions were aggravated. On Friday the headache was much more intense. There was no vomiting, no tympanites, and the temperature was 102° or 103°. Saturday night the woman began to have some pain in the abdomen. Sunday afternoon this pain became more severe, and Sunday night it increased as rapidly as if she had a perforating gunshot wound. The distention was great; temperature ran to 106°; pulse, 160; and on Tuesday morning she died. I made a post-mortem with Dr. Carl Fisch, and found a general peritonitis. Cult-

ures were taken at the time from the secretions and from the spleen. On examination, these were found loaded with grip bacilli. As this was the only organism present, we felt justified in ascribing the peritonitis to its influence. Similar cases have been reported by German and one or two other foreign observers.

Dr. L. J. Jones, of Linden: Twenty-five or thirty years ago, we treated all cases of appendicitis as typhoid fever or general peritonitis. Probably the better diagnosticians of to-day can differentiate between the different abdominal diseases, and this is the reason of our better success in their treatment.

Dr. J. A. Larrabee, of Barnard: I think there is hardly any room for disagreement on the subject. We can agree with the main part of what has been said. The essayist called attention to the fact that the grip bacillus caused these diseases. The first speaker in the discussion said they were caused by the toxins, that selected the point of least resistance to invade the system, and it has been shown that we might have appendicitis and peritonitis as a result. All of us know that, twenty-five or thirty years ago, we diagnosed our cases as typhilitis or perityphilitis, and never thought of operation at all. The disease is much more frequently diagnosed than before. We all know that we have gastro-enteritis in connection with grip, and it seems very plausible that anything that would produce an inflammation in the stomach and intestines, would have an influence in causing appendicitis.

Mr. Dallas, in closing: I would emphasize again, that all people with

influenza should be treated at once, and given tonics for awhile after they are convalescent. The disease should be treated physiologically, as diphtheria is treated. I wish the bacteri-

ologists would pay less attention to snake-bite remedies—because everybody knows that the present remedy is entirely satisfactory—and pay more attention to the treatment of grip.

## NEWER METHODS OF BLOOD EXAMINATION, FOR TYPHOID, WITH DEMONSTRATION.\*

BY B. M. SHOEMAKER, M. D., St. Louis.

(In the absence of Dr. Shoemaker, Dr. G. C. Crandall presented the subject.)

There have been developed within the last few years several methods of blood examination for typhoid fever without the use of the microscope. These are sometimes referred to as the macroscopic Widal reaction. It is spoken of as the Ficker test, and consists of obtaining agglutination with a dead culture of typhoid bacilli. He prepares a twenty-four-hour culture, kills it by adding 1 per cent. of formalin, and uses this with the diluted suspected blood serum. If the blood is from a case of typhoid the mixture will produce agglutination of the dead bacilli suspended in the solution, and there will be a slight flocculent precipitate similar in appearance to a slight precipitate of albumen. This test has been used by Ficker and others for a considerable time with quite satisfactory results, and is especially valuable for one who wishes to make a test with a preparation which he can easily keep in stock. This method has been modified to some extent by Ruediger of Chicago, who adds the blood to a formalin so-

lution before mixing with the dead culture. Borden of New York has made another modification, using an agar culture, from which he washes the bacilli with a saline solution. This does away with some of the albuminoid precipitate of the bouillon culture.

I have found the Ficker test and its modifications quite reliable, having frequently checked the results by tests which I have had the city bacteriologist make of the same blood.

Another modification is that of Von Theiling. Instead of taking the blood in a tube he uses a piece of blotting paper, dissolving the blood off the blotting paper, which is said to be quite accurate. The macroscopic method in its various modifications has been used in both Europe and this country to a considerable extent with quite favorable reports. It appears almost, if not quite, as accurate as the microscopic method, and for the physician in the country it is a valuable aid in diagnoses. I have a dead culture which I have kept for nine months, and it still gives a good reaction. Ruediger obtained a distinct reaction with blood which he had in the laboratory for a year. It is a test which should be used in the country

\*Read before the St. Louis Medical Society, May 27, 1905.



much more than it now is, and I believe will be found quite easy of application.

I have for demonstration some tubes of the Ficker, Ruediger, and von Theiling tests.

## EXAMINATION OF BLOOD FOR MALARIA. WITH DEMONSTRATIONS.\*

BY G. C. CRANDALL, M. D., St. Louis.

Standing in close relation to the typhoid reaction, is the examination of the blood for malaria, especially in malarial districts like our own. Frequent mistakes have been made in the diagnosis of continued fevers, but the improved clinical methods are lessening these errors. The presence of typhoid and malaria, associated in the same individual, is not common, but has been occasionally demonstrated. We know a patient may have typhoid, and at the same time have in his blood the malarial organisms, which latter usually subside somewhat in the presence of the typhoid; and as the typhoid improves, the malaria becomes manifest again. In the City Hospital I have found two such cases, and as the typhoid recovered the malaria reappeared, until controlled by quinine. This might be called true typhoid malaria fever. Is it possible to diagnose malaria clinically? Yes and no. Typical cases of malaria can usually be diagnosed clinically, but many of the cases are atypical.

Is quinine administration a reliable test? If you give quinine to a patient, and he improves, it has been said by some that this is strong evidence that the individual has malaria, but I believe it is not a satisfactory

test. Quinine may be used for many slight troubles, and the patient improves. Children, especially, respond readily to quinine. Quinine is not a positive test. It may, however, be a negative test. For example, if you have a continued fever of considerable virulence, and you have given quinine freely for several days or a week, and the patient does not respond, you can be quite certain that the case is not malaria, or that there is some other condition associated with it. How can we make a positive diagnosis of malaria? Only by finding the organisms in the blood or tissues. Finding the pigment of the malaria organisms in the blood is also evidence, but we have other pigments (the hematogenous pigments and others), and the appearance of the white corpuscles sometimes simulate pigments, which makes this test very confusing and unreliable.

If we have a thin film—many are too thick—and stained with a reliable stain, as a good methylene blue eosin, the organisms will show plainly, as a rule. If the organisms are very few, Ross, of England, has discovered a method of finding them. Take a thick drop of blood upon a slide and dry. Allow water to flow over it carefully, standing until it dissolves out the hemoglobin; pour off, and again dry thoroughly, then stain as a

\*Read before the St. Louis Medical Society, May 27, 1905.

film. The red cells do not stain, but the leucocytes and the organisms are quite easily found. The pigment of the organisms stands out very clearly. This is a very useful method where the organisms are scarce. This method of staining blood may be of value, also, in demonstrating bacilli in the blood.

I have under the microscope, specimens showing the various forms of malaria.

#### DISCUSSION.

Dr. Gradwohl said the Widal reaction was not an absolute means of diagnosis and must be considered only as a laboratory accessory, by performing it in an exact manner, and it could only be performed in an exact manner by only an exact dilution. It was as impossible to make an exact dilution by the color index as it would be to make a leucocyte count by observation of the smear. The color index would certainly depend upon the amount of hemoglobin. If the blood was rich in hemoglobin a greater degree of dilution would be necessary to get the color index, and in the case of blood poor in hemoglobin one would have to make a less dilution. Hence, to put the Widal reaction on a proper basis, it was necessary to use the capillary tube and make an exact dilution. It did not seem possible to maintain the Widal reaction even as a clinical test if the dried blood method came into vogue, for enough mistakes occurred even with the exact method.

Dr. John Young Brown was impressed by Dr. Clopton's emphasis upon the possibility of delaying operative treatment while waiting for a multiple leucocyte count. That was

a point well taken and the time would come when exploratory operations would be the rule. The essayist was right in saying that there was a possibility of delaying immediate operative procedure which might prove dangerous while waiting for the leucocyte count.

Dr. Crandall, in closing, said that in regard to the serum method, compared with dried blood, the former is, of course, most accurate, and this could easily be applied in the macroscopic test by the use of little graduated pipettes. Merck and Mulford put up tests with these pipettes for making the dilution. With so convenient and easily applied a test the blood could be examined daily, as he had done in some cases of typhoid. As regards the Widal test in general, he had a great deal of blood examined since the work was undertaken by the city laboratory under Dr. Ravold, and had found the results very reliable. For taking blood, the ordinary Hagedorn needle answers the purpose very nicely, having a lance-shaped point, which causes the blood to flow easily. Referring to cold baths as a means of diagnosis, he thought that in cases of acute tuberculosis, sepsis, or pernicious malaria, the fever would continue despite the cold baths. In other fevers the cold might have some effect in shortening the period. The use of quinine was very reliable in malaria, but he did not like to give it until he had examined the blood. Before giving quinine he made it a rule to take some blood for examination. There was no question but that two or three days' treatment made it more difficult to find the organisms. In pernicious cases, however, they may

be found for some time after the administration of quinine. He recalled one case, in which the patient at the city hospital had taken sixty grains of quinine daily for a week, and yet it

was very easy to find the organisms of the crescent form by the Ross method, although the patient was improving rapidly.

## PRESENTATION OF SPECIMENS, WITH DISCUSSION.\*

BY NORVELLE WALLACE SHARPE, M. D., of St. Louis.

### I.—POST-MORTEM SPECIMEN: ANEURISM OF THORACIC AORTA.

This specimen is not in my line of work; it was but by accident that I encountered it. It occurred in the person of the husband of a servant of mine. He had complained for many years of "asthmatic attacks." When they became *very* severe he came to see me. He had been treated by various physicians. Beginning with August, 1903, I have notes which read much as follows: "The patient complains of 'shortness of breath.' This asthmatic condition has prevailed for many years. Has pain under the xiphoid; worse at night; radiating down the right shoulder and arm. Radial impulse almost, if not exactly, identical on the two sides. Cardiac area moderately increased. Heart sounds practically normal except in the aortic area. Normal dullness at the origin of the great vessels vaguely increased. No tracheal tug. Nothing palpable nor audible that would warrant a diagnosis of aortic aneurism, and yet I suspect its existence." That was in 1903. I never saw the patient again until this year, when he died in February of a ruptured aneurism of the arch of the aorta, while sleeping. The patient died without waking his wife, pre-

sumably, therefore, without violent struggles, though she later stated that he had acted queerly that afternoon, and she thought that he had been drinking. The aneurism, as you may observe, is in relation with the base of the heart. Through one of the eroded patches the rupture had occurred, and the pericardium was found ballooned with blood. Without any special skill, in the differential diagnosis of such affections, what I might call an intuition led me to suspect aneurism, for there were not sufficient symptoms to warrant a definite diagnosis. So far as I know, there was no antecedent history that had any bearing on this case.

### II.—GANGRENOUS AND PERFORATED APPENDIX.

The next specimen is an appendix, which of itself is not specially interesting, but the history is. This occurred in the person of a young man of twenty-four years who lived up the state. He had previously enjoyed practically perfect health. He had been sick but three or four days, the present attack beginning with constipation, general malaise and abdominal pain that became localized in the right inguinal region. The temperature reached 105+ degrees. The treatment previous to my call had consisted of

\*Presented before the St. Louis Medical Society, June 24, 1905.



narcotics, suppositories, cathartics, rest in bed, limited diet, etc. When I examined him, about 8:30 A. M., he had a temperature of 99.8 degrees, pulse 95, respiration 18. There was a foul breath, dry mouth, red flush surrounding eyes and mouth. There was general abdominal tympany; the patient was *free from pain* (which had been present early that morning), but upon palpation the most sensitive point was still to be found in the appendicular region. Muscular rigidity was *not* well marked, but the right rectus was slightly stiff and abdominal respiratory movements were somewhat restricted. The picture was, in my opinion, that of a beginning and advancing peritonitis, with sepsis, and I advised operation. I was opposed in my judgment by the two physicians in charge. The boy had been very sick, with the classical symptoms of appendicitis. The temperature had dropped to almost normal; he felt very much better, and was practically well in the judgment of his parents, and greatly improved in the judgment of the physicians in charge. I urged operation, and, after considerable debate, they finally agreed. The boy was removed to the hospital and was operated upon at 12 o'clock. The appendix was found posterior to the cæcum, high up, half way to the liver, firmly bound down by adhesions, tightly filled with feces, was gangrenous, and had two perforations. About a cupful of very foul pus was evacuated from a peri appendicular abscess, and the pelvis drained with a wick. The temperature at 8:30 A. M. was 99.8 degrees oral; before going upon the table at 12 M. it was 103.3 degrees oral;

when returned to bed again, it was 101.4 degrees rectal. Reaction was satisfactory, and the patient recovered. The points of interest in this case are that the patient had had a temperature curve running to 105 degrees; when I saw him at 8:30 A. M. it had dropped to practically normal, with respiration of 18 and absence of pain, an *apparent general improvement*—the perforation, gangrene and abscess existing with a general picture of improvement. Another point of interest is the fall of practically two degrees in the temperature from the time he was put upon the table until he was taken off, and the smooth recovery.

### III.—OVARIAN CYSTOMA WHICH FOLLOWED DOUBLE SALPINGO-OOPHORECTOMY.

This is a case of an ovarian intraligamentary cyst. This young woman was twenty years old, when first seen in 1900. She had not been well for about three months and her present sickness was supposed to have been brought on by "lifting a heavy tub." She had previously had certain glands in the neck, probably tubercular, operated upon. My notes at this date abbreviated, are about as follows: "She has had but one menstrual period since her illness. Patient much discouraged, is undoubtedly sick and looks septic. No further history of interest." Operation was recommended with a diagnosis of double pyosalpinx; the uterus was found bound down; on both sides masses were felt involving the tubes; the patient denied infection; urine negative. Both tubes were removed with the ovaries from a mass of very

dense adhesions. The work had to be done with extreme rapidity on account of the patient's exhausted condition. There was nothing of interest in her recovery. From one of these ovaries there was a globular growth the size of a large walnut, upon which Dr. Carl Fisch reported as follows: "An examination of the ovarian tumor handed me some time ago showed an extraordinarily interesting process. It consisted altogether of one large caseous tubercle; giant cells and tubercle bacilli are easily demonstrated. The other tube and ovary did not offer anything demonstrable." My notes under date of May, 1902, are as follows: "Patient claims she has never missed a period since operation. She looks well, and save the fact that she is obliged to cease work during the menstrual period, she is in good shape. During the menses she suffers intensely and feels weak for a day or two afterward. The patient objects to examination." This virgin had one of the smallest vaginas I have ever encountered, and the abdominal wall was, normally, the tensest I have ever seen, a combination which rendered examination difficult. I have made two laparotomies upon her and the union in each instance has been sufficiently good to preserve this unusual though normal rigidity. This year's notes I find to the following effect: May, 1905. "Patient has continued to menstruate regularly since operation, averaging four days, with intense pain on right side, radiating down the thigh and leg. Otherwise steady improvement since operation, her health being excellent. On examination the uterus was found to be two and a half inches

in depth, retroflexion to the left and held down by adhesions. No special tenderness anywhere. On May 10th she was operated upon and I found everywhere numerous dense adhesions. The uterus was enlarged and somewhat friable. Intraligamentary cysts and fragments of friable ovary on the right side were removed, having evidently escaped attention in the dense adhesions at the first operation. The distal and proximal stumps were mattress sutured and ventrofixation of the uterus was made. Schroeder has recently reported three cases of ovarian cystoma. The first, a pseudo-mucous cystoma; its benign nature proved by the microscope, was removed and three and one-half years' later on laparotomy a general peritoneal carcinosis was found. He believed that fragments of the benign tumor were left, which later underwent malignant degeneration. The second was a cyst adenoma of the ovary which he could not remove, and he sewed the wall of the cyst to the abdominal wall and then opened it. A fistula followed which remained patent for several years; gas and faecal matter at times escaped. Another laparotomy was performed and the cyst was again found inoperable. There was an attempt to extirpate the fistula which led to the pelvis with drainage through the vagina. One and a half years' later the fistula closed, but a year later it opened again. Again it closed and seven and a half years after the first operation the vaginal fistula was still secreting and there was a hernia through the abdominal fistula. The tumor showed no signs of malignancy. The third tumor, a dermoid cyst, while obstructing labor, was pushed

upward into the abdominal cavity. It ruptured and the contents gave rise to another tumor. About a year after labor, a tumor the size of the fist was felt to the right above the pelvic brim. Another immovable tumor was felt under the left costal arch. A laparotomy was performed and the pelvic tumor was found to be a dermoid cyst of the right ovary, the upper tumor, fixed to the abdominal wall, was removed with much difficulty. It was made up of fatty sebaceous matter and pervaded by granulation tissue containing numerous giant cells.

This specimen is now in preparation for sectioning. If anything of interest is noted, a report will be made to the society.

#### IV.—TOTAL EXTIRPATION OF LEFT CARCINOMATOUS BREAST BY THE HALSTED METHOD.

The patient was an unmarried woman, aged seventy-one, an inmate of a Home which was under my charge. There were no definite symptoms. I heard that she had had some trouble with the breast, and with a little persuasion I secured her permission to examine. I found a slight hardness with retracted nipple. This latter point is supposed to be of considerable weight, though, in reality, it is not of great importance in the aged, for in aged women one frequently finds retracted nipple with no sign of malignant disease. After working up her exceedingly vague history, I came to the conclusion that she probably had a carcinomatous breast. However, the circumstances within the Home were such that I did not wish to make it a major operation

unless absolutely unavoidable. A section into the breast was made, which confirmed my suspicion of carcinoma. This plan is not to be followed save under exceptional circumstances. The patient was operated upon and every reasonable precaution taken to preserve vitality, but she died within twenty-four hours. The important point in this connection is the question why she died, or rather why she, as a type of certain women, die following such operations: whether she had had for a long time this malignant growth that had progressed so slowly and painlessly that she had not been aware of it, and yet that this had so undermined her powers of resistance that she succumbed to an extirpation, for ordinarily such an operation should not kill a woman. She showed no evidence of great shock and she lost but little blood. I am inclined to believe that her powers of resistance were weakened by this process, which had been going on for some time, but I consider it debatable.

#### V.—SPINA BIFIDA.

The next case is not from my material. The specimen was sent to Dr. James Moores Ball to be stored in the college museum, and Dr. Ball kindly requested me to present it. It is a case of spina bifida which presents some unusual features. The operation was done in a country town. The following is the report of the case sent to Dr. Ball by Dr. John D. Seba, of Bland, Missouri, who had the case in charge:

"I was called at 10 o'clock A. M., June 10, 1905, to attend Mrs. M. P. in confinement. Patient aged nine-



teen years, first confinement. Presentation and everything else connected with the labor were normal, except that when head and shoulders were born the progress of labor was interrupted. This, as I found afterwards, was due to the large tumor or spina bifida, on the sacrum of the child. Gentle traction was made and the lower extremity was born with a gush. Upon examining the tumor, I found that a small portion was not covered with skin, and this part of the tumor was covered with only a glistening membrane. At this place the tumor had ruptured owing to the pressure it was subjected to in passing through the pelvis. Although the pelvis of my patient was large and roomy, yet a tumor as large as the child's head and connected with the spine and buttocks was too much to pass through it, hence the rupture at its weakest point. A diagnosis of spina bifida was made, first by the connection of the tumor with the spine; second, by seeing the fluid escape from the tumor, and, third, with the finger placed over the spine one could plainly feel absence of the coccyx. The child was separated from the placenta and the cord dressed. We then removed the placenta and dressed the mother. An examination revealed that she had escaped laceration. There was a continued oozing of fluid from the tumor and several stitches were taken to prevent further escape. The parents were told that the chances for life in the child were decidedly against it, that without an operation it could live only a few days, and that with an operation its chances for life were about one out of three. They consented to have me remove the tumor.

The child, which had been dressed, was carried two blocks to a photograph gallery where three different views were taken—one of the face, for the parents, and two of the pathological condition, a front and back view. The back view was the best, inasmuch as it showed the connection of the tumor with the spine, but the photographer accidentally spoiled the plate in preparation, hence we have only the front view to present here. The child was then carried to my office, two blocks, where we prepared for the removal of the tumor. Several points were decided upon: First, to do the operation as rapidly as possible; second, to use catgut sutures, and, third, to paint these sutures over with flexible collodion to prevent the introduction of germs, and also to prevent the escape of fluids from the site of operation. My son, Dr. W. E. Seba, administered the chloroform and he estimates that about 5 ii was all that was used. The child took the anesthetic well and went under it rapidly. We operated by the aid of a gasoline lamp, which gave a very good light. My colleagues, Dr. W. R. Ferrell, of Bland, and C. T. Leach, of Fuersville, assisted us in the operation. One difficulty in the operation was that the meconium was passing very frequently, and as the anus was near the tumor, as you may see by the photograph, this endangered the operation by the possibility of infection. One of the attendants held a pledget of absorbent cotton over the anus and kept the charge back until after the operation was completed. We could feel in the tumor some hard substances, and various speculations resulted as to what

they were. Some thought that these might be kidneys or the undeveloped uterus. But upon cutting the tumor open from the site of rupture to the spine, and turning the tumor inside out, it was found that these tumors were nerve endings and nerve ganglia. There was also found in it portions of muscles derived from the muscles of the back. This muscle tissue was supplied with two small arteries, which were caught with hemostatic forceps by an attendant as soon as cut. The cutting was done with a pair of straight scissors, along lines previously marked off. There was no dissecting out of spinal covering membrane, and no separate suturing of the same as is generally done in these cases. A clean cut was made with straight scissors and the skin was not joined end to end, but the two surfaces that were lined with cord membrane were held together and sutured with continued catgut sutures. The needle was passed about one-eighth of an inch below the two cut ends of the skin, from right to left, and the assistant always held the last taken suture taut until another stitch had been taken. The suture from left to right overlapped the cut ends of the skin, giving it the appearance of a sack sewed together over the seam. This gave it a rather bungle-some appearance, but it served the purpose well: first, putting the two inner sides of the cord membranes in opposition; and second, retaining the fluid. We wanted to hermetically seal the wound to prevent exudation of fluid, and second to prevent infection, the latter of which seemed the most difficult task of all since the site of operation was so

close to the anus, where fecal matter was likely to pass over it any moment, and infection meant death to our patient. The application of collodion was only kept up for two days, then it was painted over with ichthyol for one day, then we changed to a zinc oxid salve for a dressing. I will here state that to find a suitable dressing was our most difficult task, but none of them was entirely satisfactory to me. I will also state that had we had at our command an incubator to bring our patient from under the shock it would have been a great aid to us. The child turned pale and cold, and ceased breathing, and we had to apply restoratives to keep it alive. We applied warm cloths to its extremities, bathed it with brandy and performed artificial respiration until 11 o'clock that night, when our patient had apparently survived, and it was taken home to its mother. Before it was taken home it was allowed to nurse a woman who had a three weeks' old baby.

Until otherwise proven I claim this the youngest child that has undergone an operation under chloroform. It was just four hours old when operated on. The operation lasted about fifteen minutes. The patient seemed to make an uneventful recovery."

I consider this an exceedingly interesting history. There are one or two points to which I wish to allude. The doctor seemed to be solicitous in regard to the possibility of infection of his wound by meconium. Meconium infection takes place either through the mouth or anus; if through the mouth, either from the air or mucus; if it takes place through the anus it occurs from the air, bath,

clothing or the vagina of the mother. If it does take place,—it does so within twenty-four hours at the latest. To show how rapidly it occurs,—Escherich found germs in the rectum from three to seven hours after birth. I am not inclined to believe in the possibility of kidneys or uterus being found in this sac. Such a thing has not occurred in my experience, and so far as I am aware is not on record in the literature. In regard to the nerve endings I believe the doctor to be not altogether correct. I will show you the fragment he speaks of and incidentally I wish you to note the size of the tumor, though contracted with strong formal solution. You will see this band of muscle to which he refers. You will see also a few cystic bodies, one of which has ruptured since I first noted it. The so-called “nerve endings” and “nerve ganglia” you will find here in a stellate form. In my judgment these are tendinous terminations of the muscle fibers. I find no evidence of the presence of the cord. I find no evidence of large nerve bundles, but at the same time I do not feel at liberty to make a positive statement, for no sections have been made, owing to the fact that the unutilized specimen is to be preserved in the museum. I should be very glad to have Dr. Blair or others give their opinion in regard to the use of the incubator for very young children as suggested by Dr. Seba as a prophylactic against shock. I do not recall that a child under four hours old has been operated upon under anesthesia and survived.

In spina bifida the spinal laminæ fail to unite, due to faulty fusion of

the blastoderm; it may also be due to pressure, *e. g.*, hydrops cerebrospinalis. It occurs in about the ratio of 1:1000.

Various names have been applied to spina bifida according to the development: (1) *Spina bifida cervicalis*; (2) *spina bifida dorsalis*; (3) *spina bifida lumbo-sacralis*. There are cases known as *myelocoele*, in which the skin is absent. This is held to be invariably fatal. *Meningocoele* is applied to cases where there is a prolapse in the meninges of the cord. It occurs in about 8 to 12 per cent. of all cases. In *meningomyelocoele*, both membranes and cord are involved. This is by far the most frequent, comprising from 62 to 86 per cent. of all cases. *Syringomyelocoele* or *myelocystocoele* is an extreme ballooning of the central canal and is very rare; de Ruyter states that it always is lateral. In *rhachischisis* there is a bony separation, while in *rachiochysis*, fluid will be found in the canal. In *hydrorrhachis externa* is found a serous effusion into the subarachnoid space; in *hydrorrhachis interna* there is an effusion into the central canal of the cord. Sex is generally supposed to be a matter of indifference in the distribution of these cases. However, von Moltke has reported fifty-eight cases of spina bifida sacro-coccygealis, forty-four cases occurring in the male, fourteen in the female. The literature records one case in which there was fissure of the entire column. The course varies; there may be spontaneous closure. Frequently in such cases there develops an increased tension which manifests itself by dilatation of the ventricles of the brain and separation of the cranial sutures. There is



also what is known as the obstructive form in which the nerve fasciculi emerging and returning, will so fill the entire channel that in time they will block it—pressure symptoms will ordinarily be absent, and pressure upon the tumor will fail to induce increased intracranial pressure. In another form ulceration of the wall of the tumor will take place, this usually is found in hydorrhachis interna, and may occur ante or postnatal. Frequently where there is a perforation, a dribbling of spinal fluid persists. Infection is not uncommon. Finally, hemorrhage into the sac may occur either natal or postnatal. Usually these children become asthenic, there is incontinence of urine and feces, paraplegia, ulceration with or without infection and convulsions followed by death. Yet it is not invariably fatal for we know of adults that are spinal bifids and yet lead fairly normal lives. In diagnosis in the lumbo sacral variety, we must distinguish between post-rectal dermoids, cystic hygroma, lipoma, sarcoma, ischiatic hernia, congenital sexual tumors (spina bifida anterior in the female) and sacro-coccygeal teratomata.

The treatment, at various times recommended, consists in the application of elastic ligatures, aspiration, injection of fluids (Brainard or Morton), electrolysis, and primary extirpation with closure. We have gone far from the dictum of Bardeleben, who, in 1867, said (in reference to the latter): "It is too dangerous in comparison with its advantages, and should be completely discarded." In operation on meningoceles there are 80 per cent. recoveries; meningomyeloceles give 50 per cent. recovery. Wernitz has

reported 153 operations, with 87 recoveries and 76 deaths; mortality 56 per cent.

Appropriate surgical treatment consists in an elliptical incision; restore nerves to canal; endeavor to approximate the laminae, or employ periosteal attachments, or, if this be impossible, bone flaps, bone grafts, and celluloid plates. *Especial care must be paid to detailed asepsis.* Sometimes leakage persists, and there is danger of the patient dying of asthenia. Usual causes of death after operation are meningitis, bronchitis, enteritis, and post-operative shock from cerebro-spinal leakage.

St. Clair has given us the following series of tests for the determination of the identity of cerebro-spinal fluid: (1) It is usually transparent like water, and contains no sediment, but we sometimes find it quite cloudy. (2) It is either tasteless or faintly saline, faintly alkaline in reaction. (3) Specific gravity between 1005 and 1010. (4) Not viscous; gives no precipitate (mucin) on adding acetic acid. (5) On boiling, there is not more than a trace of coagulum of serum globulin; serum albumin is usually absent, for, after saturating with magnesia sulphate and filtering off the precipitated globulin, no proteid is found in filtrate. (6) Boiled with Fehling's solution, reduction takes place. (7) The reducing substance may be obtained by evaporating to dryness an alcoholic extract of the fluid; it is then found in needle-like crystals (pyrocatechin). (8) An aqueous solution of this residue does not ferment with yeast. (9) The fluid is absolutely sterile.

## DISCUSSION.

Dr. Joseph Grindon, referring to Dr. Sharpe's report of an ovarian cyst, following double salpingo-oophorectomy, in which the three cases of Schroeder had been mentioned, said that the first case would be of great interest if one could accept the idea that the failure to find a malignant condition at the first operation, was proof that there was no such condition there. Assuming that there was none, and that at the later operation it was found, it reminded one of Lack's unique observation, and his refusal to accept what was to-day the dominant notion—that the cause of carcinoma is from without. He claims that it originates from within, and is not due to any germ. He produced the disease in a single instance by slicing the ovaries of a rabbit and turning the fragments loose in the abdominal cavity, later finding the peritoneum studded with carcinomatous nodules. Schroeder's case seemed to be in line with this observation.

Dr. John C. Morfit, speaking of the old lady with carcinoma of the breast, and Dr. Sharpe's question, said that these women in charitable institutions were patient, long sufferers, and when they did reach the physician with carcinoma, a pretty thorough going over would discover some other condition quite as serious as the malignancy. This case reminded him of a patient, a woman of seventy-one, with a malignant ulcerating breast, temperature of 104 and 105, no axillary enlargement, but a very large mammary abscess, and pus in the urine. The patient was septic. He had done a Halsted operation and dissected out

the axillary glands. The temperature was reduced immediately from the drainage, but there was no effort at healing whatever. She lingered for two or three weeks, and a bed sore developed over sacrum, followed in forty-eight hours by a collection of fully a pint and a half of greenish pus under the integument. This was evacuated. Four days later there was about a quart of pus under the scapula, and that was evacuated, but the patient died of exhaustion and sepsis a few days later. She gave no symptoms of any serious kidney trouble, although the pus in the urine was suspicious. The pericardium was found completely adherent to the heart, which lay as if in a spider's web of adhesions. There was no malignancy about the gall bladder or stomach, but the right kidney was full of pus, and there was a stone in the pelvis of the kidney. Left kidney normal. So, whatever harm the malignancy did was overshadowed by the other conditions. He added that he now had under observation an old lady with a tumor in the right breast as big as the fist and hard as a stone, but the case was inoperable, because, in the upper right abdominal quadrant was another mass undoubtedly malignant as indicated by gastric analysis.

Dr. Sharpe, in closing, was unable to say how much urine was passed subsequent to operation. The patient had not previously complained to him of much pain, but after her death he heard rumors that she had complained to her friends of a great deal of pain. This occurred in a Home for Old Women, and the inmates of such institutions have peculiar ways of living, some being exceedingly loqua-

cious and others concealing their bodily infirmities, so that it is often exceedingly difficult to determine a definite anamnesis. At the operation the axillary glands, the supra and infra-clavicular glands, and those in the triangles of the neck were cleaned out. But one gland, and that infra-clavicular, seemed palpably enlarged. Hemorrhage was insignificant. The vessels should be caught as severed, thus necessitating a liberal use of ligatures and clamps. It was doubtful if the patient had lost four ounces of blood. She was started under chloroform anesthesia, and later ether

was substituted for its stimulating effect. The time of operation was four hours. He again wished to emphasize the point that a retracted nipple in a woman beyond the meridian of life, as a diagnostic sign of malignancy, was not dependable.

Dr. Robert Barclay asked Dr. Sharpe if he was correct in having understood the doctor to say that the patient was under general anesthesia for four hours.

Dr. Sharpe replied that during the last half or three-quarters of an hour the patient received no anesthetic; she was on the table for four hours.

## A STUDY OF DIGITALIS\*.

BY S. A. JOHNSON, M. D., Nevada, Missouri.

This paper is a short resume from the literature of a subject very important, but which has been more or less neglected by most of us, or, at best, the accepted teachings have not been generally observed in the administration of it. So I have selected this subject, first, from its importance, and, second, because of its complexity. The more extensively you read the literature on it the more difficulty you will have harmonizing that literature into a single paper; but, laying aside one or more important differences, a middle ground can be taken that is not radically at variance with accepted knowledge of the subject.

Digitalis has been known to medicine for centuries.

As early as 1597 a treatise was published on it. Its therapeutic powers were investigated in 1776, and in 1871

a medal was given to Notivelle for the discovery of a white crystalline body, supposed to be the active principle, but was later discovered to be a mixture and did not represent the active principle, and so today we have no one principle that answers for the combination of the several principles in digitalis.

Schmiedeberg's analysis of digitalis is the accepted one at the present time, although a definite decision in regard to all its constituents cannot be made, but according to this analysis digitalis consists of four active principles, namely: digitalin, digitoxin, digitalein and digitonin, and an inert principle—digitin, besides other constituents, as tannin, starch, sugar, gum, coloring matters, oils and acids.

Digitalis has no alkaloid, and is, therefore, very unsatisfactory of assay. First, Merck lists two amorphous, white-yellow powders called

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digitalin, French and German. The French digitalin is soluble in water; dose, 1-250 grain. A similar body to this was dropped from our U. S. P. in 1880. This German digitalin is soluble in alcohol, not soluble in water; dose, 1-32 to 1-24 grain. Both have the same characteristic action on the heart.

Second, digitoxin, most abundant and most active constituent of digitalis, is a white crystalline powder, slightly soluble in alcohol, not soluble in water; dose, 1-250 to 1-125 grain. This forms a sediment in alcoholic preparations because of its slight solubility.

Third, digitalein is soluble in alcohol and water; it is a mixture; dose, 1-100 of a grain.

These three are the active cardiac stimulants of digitalis, and are antagonized in their action by digitonin, a cardiac depressant, insoluble in alcohol but soluble in water, and is the principle upon which the diuretic action of digitalis depends. Alcoholic preparations, while markedly diuretic in low arterial pressure cases, do not exert so great a stimulant or irritant effect upon the kidneys as do the infusions (Branton) which contain this diuretic property, digitonin. From the solubility of digitalein, it is also in the infusions.

Digitalin, digitoxin and digitalein are the three heart stimulants found in the alcoholic preparations. Their combined action stimulates the muscular fibers in the cardiac and the arterial walls, thus increasing the cardiac force and in a double way raising blood pressure. These effects come from the stimulation of the nerve endings of the cardiac ganglion, and

at the same time slow the heart by stimulating the end fibers of the vagus—the inhibitory nerve of the heart—by prolonging diastole.

An important consideration is the difference of digitalis from other cardiants, in its powerful stimulation of the arterial walls. This prevents the heart strengthening from resulting in a clear gain (especially in view of its slowness), for resistance at the same time is increased. Since the increased heart action depends upon the muscular cardiac walls, it cannot do so well when they are weakened by dilation or “fatty degeneration,” and when there is an aortic regurgitation, for we increase the arterial resistance more than we strengthen the heart, and thereby favor the backing up of the blood in the heart. If one lesson is more important than another in the study of the action of digitalis, it is that its heart range of usefulness is on failing compensation, a beginning weakness of the heart muscle, so all the strengthening of the organ should be husbanded.

While digitalis slows the heart and tones its muscular walls, it unfortunately adds resistance to the circulation in the arterial walls. To my mind, this positive effect of digitalis should always be borne in mind, and minimized by giving an arterial relaxant to counteract this effect. The nitrites and nitro-glycerine will accomplish this. In lobar pneumonia, I generally give nitrite of sodium between the doses of strychnine and caffeine, etc., if the heart is tumultuous or labored, and I prescribe it invariably if I resort to digitalis. It then follows that digitalis, in well-regulated doses, will restore rhythm

to an irregular heart. It is pre-eminently useful in a dilated, rather than in a weak, heart. The effects of digitalis are slow in coming on, usually several hours. The effects are similarly slow in passing off; so, when great promptness is required, digitalis is not available.

Digitonin and digitalein are the active principles found in the infusions. If this is borne in mind, it is not surprising that in practice it is found that the infusion is not a serviceable cardiac stimulant, or that the tincture does not act well as a diuretic. If this is so, should not our prescriptions for the infusion call for the watery maceration of the leaves, instead of being made from dilution of the tincture? Again, owing to the poor quality of much of the digitalis on the market, or at least the varying strength of the products of the various manufacturers, and with the unsatisfactory method of assaying, and the different standards of strengths by different companies, it is best to specify one manufacturer's product, and study its limitations and effects.

From the fact that digitoxin is so feebly soluble in alcohol, the tincture should be given dropped on sugar or bread, the patient taking no water shortly before or afterwards, so as not to precipitate this active principle by water.

This subject is too lengthy to deal minutely with its therapy or toxic effects. No form of organic disease contraindicates the use of digitalis when the compensatory action of the heart is failing. Accumulative action in the sense of an accumulation of the drug in the system, followed by an

outburst of symptoms, are no longer feared. No such action occurs.

Toxic symptoms arise only from an overdose or from prolonged administration, and the condition of poisoning is followed by the regular train of symptoms, viz.: First, stimulation of the vasar motor nerves, with high arterial pressure, then a following relaxation, with reduced blood pressure and weak heart, and finally failure of the circulation, with the heart in diastole. One author maintains that death is usually due to paralysis of the heart in ventricular contraction; and another one has found it in diastole. Both conditions are possible; first, from a teternizing effect of the drug on the cardiac ganglion, and the last from the effect of a paralysis of the vagi.

A few of the contradictory teachings of digitalis are the following:

Digitalein is not found in the leaves. Another, as Ossler, finds the tincture as satisfactory a diuretic as infusion. Another claims that the effect on the heart and action is nil in a healthy person, while others ascribe to the diuretic properties, its first effect of contracting the renal arterioles, then shortly a dilatation of these vessels in the kidneys, and with general high arterial pressure increased elsewhere over the body, makes an ideal condition for the most favored diuresis, therefore acting upon a healthy as well as a venously engorged kidney.

One author claims that digitalis is oxidized in the system, while another that it is excreted largely by the kidney thereby explaining its activity on the kidneys. These conditions are not so vital a discrepancy as to effect

an intelligent understanding of the action of the drug in disease.

As stated, this paper has been composed after a considerable study of recent works on this subject, and I think it well worth our time to consider it. There are only a few drugs with so pronounced activity whose general properties have been in the main understood, that have been given so little close study. Much has been necessarily omitted from this important subject in spite of the fact that we have no more valuable one in the materia medica and no perfect substitute for its specific action, and I hope the discussion that follows will exhaust what I have omitted.

#### DISCUSSION.

Dr. Buchanan, Dr. Johnson: Digitalis is a complex preparation, and I think the speaker was correct in this statement; but why give a complex drug when we can give a specific alkaloid? I use digitalin. Dr. Johnson gives nitrite of soda as a relaxant; I give aconitine. Digitalis and aconite

in highbounding pulse in pneumonia act excellently.

Dr. Dulin: Give digitalis in weak, irregular pulse, not in rapid bounding pulse. In pneumonia it acts as an eliminant by eliminating the toxins through the kidneys. It is the best cordial- tonic we have, except strychnia. I don't believe it is a direct tonic as strychnia, but acts by eliminating the toxins that effect the heart muscle.

Dr. Churchill: Does digitalis have a desired effect in high temperature? I have been taught that it does not.

Dr. Johnson: Digitalis was given to reduce temperature. It does not have such an effect when temperature is high. It is dangerous when given unnecessarily. Don't give it when compensation is sufficient. It is good in all valvular troubles, as it regulates circulation. Digitalis does not have a cumulative action. Give the infusion for diuretic purposes. Digitalis is contra-indicated in fatty degeneration.



# Constitution and By-Laws

—OF THE—

## Missouri State Medical Association

ADOPTED 1903

### CONSTITUTION.

#### ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the Missouri State Medical Association.

#### ARTICLE II.—PURPOSES OF THE ASSOCIATION.

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Missouri, and to unite with similar Associations in other States to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

#### ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Association.

#### ARTICLE IV.—COMPOSITION OF THE ASSOCIATION.

SECTION 1. This Association shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The Members of this Association shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies, and (2), *ex-officio*, the officers of the Association as defined in this Constitution.

ARTICLE VI.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councillor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VII.—SESSIONS AND MEETINGS.

SECTION 1. The Association shall hold an Annual Session, during which there shall be held daily General Meetings, which shall be open to all registered members, delegates and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

ARTICLE VIII.—OFFICERS.

SECTION 1. The officers of this Association shall be a President, five Vice-Presidents, a Secretary and Assistant Secretary, a Treasurer and sixteen Councillors.

SEC. 2. The President and Vice-Presidents shall be elected for a term of one year. The Secretaries and the Treasurer shall be elected by the council at its Annual Meeting, and each shall hold his office for one year. The Councillors shall be elected for terms of five years each, being so divided that four shall be elected each year. All of these officers shall serve until their successors are elected and installed.

SEC. 3. The officers, except the President, Secretaries and Treasurer, shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section except that of Councillor, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the past two years.

SEC. 4. The President shall be elected by the General Assembly on the last day of the meeting.

ARTICLE IX.—FUNDS AND EXPENSES.

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita as-

assessment upon each county society to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Sessions, for publication, and for such other purposes as will promote the welfare of the Association and profession.

#### ARTICLE X.—REFERENDUM.

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members present, a majority of such vote shall determine the question, and be binding upon the House of Delegates.

#### ARTICLE XI.—THE SEAL.

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

#### ARTICLE XII.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

#### BY-LAWS.

##### CHAPTER I.—MEMBERSHIP.

SECTION 1. All members of Component Societies shall be privileged to attend all meetings and take part in all of the proceedings of the Annual Sessions, and shall be eligible to any office within the gift of the Association.

SEC. 2. The name of a physician upon the properly certified roster of members, or list of delegates, of a component society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the annual session in the respective bodies of this Association.

SEC. 3. No person who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability.

SEC. 4. Each member in attendance at the annual session shall



enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

#### CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE ASSOCIATION.

SECTION 1. The Association shall hold an annual session at such time and place as has been fixed at the preceding annual session (or as fixed by this Constitution and By-Laws).

SEC. 2. Special sessions of either the Association or of the House of Delegates shall be called by the President at his discretion or upon petition of twenty delegates.

#### CHAPTER III.—GENERAL MEETINGS.

SECTION 1. The General Meetings shall include all registered members, delegates and guests, who shall have equal rights to participate in the proceedings and discussions, and, except guests, to vote on pending questions. Each General Meeting shall be presided over by the President, or in his absence or disability, or by his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President and the annual orations, and the entire time of the Session so far as may be devoted to papers and discussions relating to scientific medicine.

SEC. 2. The General Meeting shall have authority to create committees or commissions for scientific investigations of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved by the House of Delegates.

SEC. 3. Except by special vote, the order of exercises, papers and discussions as set forth in the official program shall be followed from day to day until it has been completed.

SEC. 4. No address or paper before the Association, except those of the President and Orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

SEC. 5.—All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

#### CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet annually at the time and place of the annual session of the Association, and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President and the annual orations, and so as to give delegates an opportunity to attend the other scientific proceedings

and discussions so far as is consistent with their duties. But if the business interests of the Association and profession require, it may meet in advance, or remain in session after the final adjournment of the General Meeting.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 50 members, and one for each major fraction thereof, but each county society holding a charter from this Association, which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 3. A majority of the registered delegates present shall constitute a quorum, and all of the meetings of the House of Delegates shall be open to members of the Association.

SEC. 4. It shall, through its officers, council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate and research work, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 11. It may divide the counties of the State into Councillor Districts.

SEC. 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates, and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

SEC. 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

SEC. 14. It shall present a summary of its proceedings to the last general meeting of each annual session, and shall publish the same in the transactions.

#### CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

SEC. 2. The House of Delegates on the first day of the Annual Session shall select a Committee on Nominations consisting of ten delegates, no two of whom shall be from the same councillor district. It shall be the duty of this Committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the State for the ensuing year shall be carefully considered. The Committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the name of one member for each of the offices to be filled at that annual session.

#### REPORT.

SEC. 3. The report of the Nominating Committee and the election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates.

#### CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councillors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.



SEC. 3. The Treasurer shall give bond for the trust reposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the Association, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any estate belonging to the Association, and execute the necessary papers; and shall, in general, subject to such direction, have the care and management of the fiscal affairs of the Association. He shall pay money out of the Treasury only on a written order of the President countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands. He shall charge upon his books the assessments against each component county society at the end of the fiscal year which shall be April 1st; he shall collect and make proper credits for the same, and perform such other duties as may be assigned to him.

SEC. 4. The Secretary, acting with the Committee on Scientific Work, shall prepare and issue the programs for and attend all meetings of the Association and of the House of Delegates, and he shall keep minutes of their respective proceedings in separate record books. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates of the Annual Sessions. He shall keep a card index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association for publication. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councillors in the organization and improvement of the county societies, and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. *He shall act as Chairman of the Committees on Scientific Work and on Publication.* He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of time to his duties which will permit of his becoming proficient, it is desirable that he should receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

#### CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councillors. It shall meet on the last day of the annual

session of the Association for reorganization and for the outlining of work for the ensuing year. At this meeting it shall elect a Chairman and Secretary, and the latter shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided. It shall be the Executive Committee of the Association and shall act for the Association during the interval between meetings.

SEC. 2. Each Councillor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least one a year for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councillor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the annual session of the Association.

SEC. 3. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society, upon which an appeal is taken from the decision of an individual councillor. Its decision in all such cases shall be final.

SEC. 4. The Council shall provide and superintend the publication and distribution of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. Further, to facilitate this work, it shall be the duty of the Secretaries of the Sections, during each Annual Session, or as soon thereafter as practicable, to deliver to the editor, or his duly appointed agent, all such proceedings, reports, addresses, papers and other documents, as may have been ordered for publication. All money received by the Council, or its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society, and all orders on the Treasurer for disbursements of money in any way connected with the work of publication must be indorsed by the Chairman of the Council and countersigned by the President and the Secretary of the Society. All matters of the Society pertaining to the expenditure of money for other purposes shall be referred, during the annual session, to the Council, who shall report upon the same within twelve hours, and if the House of Delegates orders the expenditure of money in connection with said report, the payment shall be made by the Treasurer as provided above. It shall be the further duty of the Council to hold the offi-

cial bond of the Treasurer for the faithful execution of his office, annually to audit and to authenticate his accounts, and to present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary.

In the event of a vacancy in the office of the Secretary of the Society, or the Treasurer, the Chairman of the Council shall fill the vacancy ad interim until the next meeting of the Council.

SEC. 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the Chairman and Secretary of the Council, as such.

#### CHAPTER VIII.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:—

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Nominations.

A Committee on Arrangement, and such other Committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be a member, and shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates or of the Association, or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented, which shall be adhered to by the Association as nearly practicable.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of the public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall utilize every organized influence of the profession to promote the general influence in local, State and national affairs and elections. Its work shall be done with the dignity becoming a great profession and with that wisdom which will make effective its power and influence. It shall have authority to be heard before the entire Association upon questions of great concern at such time as may be arranged during the annual session.

SEC. 4. The Committee on Nominations shall be appointed and perform its duties in accordance with the provisions of Chapter V, Sections 2 and 3 of these By-Laws.



SEC. 5. The Committee of Arrangements shall consist of the component society in the territory in which the annual session is to be held. It shall, by committees of its own selection, provide suitable accommodations for the meeting places of the Association and of the House of Delegates and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

#### CHAPTER IX.—ASSESSMENTS AND EXPENDITURES.

SECTION 1. An assessment of two dollars (\$2.00) per capita on the membership of the component societies is hereby made the annual dues of this Association. The Secretary of each county society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association on or before April 1st in advance of each annual session.

SEC. 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or the House of Delegates until such requirements have been met.

SEC. 3. All motions or resolutions appropriating money shall specify a definite amount, or so much thereof as may be necessary for the purpose indicated, and must be approved by the Council and House of Delegates on a call of the ayes and noes.

#### CHAPTER X.—RULES OF CONDUCT.

The principles set forth in the Code of Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

#### CHAPTER XI.—RULES OF ORDER.

The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, unless otherwise determined by a vote of its respective bodies.

#### CHAPTER XII.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with this Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, upon application to the Council, receive a charter from and become a component part of this Association.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the Council or House of Delegates and shall be signed by the President and Secretary of this Association. The Council or House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councillor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is practicing, or who will agree to practice, non-sectarian medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right of appeal to the Council and to the House of Delegates.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual councillors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferments shall be unstintingly given to such members.

SEC. 12. At some meeting in advance of the annual session of this Association each county society shall elect a delegate or

delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty (50) members, or major fraction thereof, and the secretary of the society shall send a list of such delegates to the Secretary of this Association, at least ten days before the annual sessions.

SEC. 13. The secretary of each county society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on or before April 1st, in advance of each annual session, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

#### CHAPTER XIII.—AMENDMENTS.

These By-Laws may be amended at any annual session by a majority vote of all the delegates present at that session, after the amendment has laid upon the table for one day.

Emergency clause provides for immediately going into effect after adoption.



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—JOURNAL—

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SHELBY COUNTY—L. W. Dallas, M. D., Hunnewell.  
STODDARD COUNTY—Geo. W. Vernon, Dexter.  
SULLIVAN COUNTY—G. S. Milnes, M. D., Milan.

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## EDITORIAL.

### THE AMERICAN PLAGUE.

The earliest authentic account of yellow fever records its occurrence in the West Indies about 1760, at which time the disease was carried by Spaniards from Vera Cruz, where it claimed more than 3,000 victims. Twenty years later, out of an army of

8,000 sent from Spain to Havana, more than 2,000 died of yellow fever within two months after landing. Between 1870 and 1879 nearly 12,000 deaths are recorded for the city of Havana from yellow fever alone. In the United States during 1870, according to the board of experts appointed

by congress, more than 100,000 were stricken in their homes, and 20,000 lives sacrificed. Probably the first experimental inoculations began in Philadelphia during the yellow fever epidemic of 1802 and 1803, when Stubbin Furth, a medical student of the University of Pennsylvania, experimented upon himself by placing fresh black vomit and blood serum obtained from yellow fever patients into wounds made in his arms and legs. Failing in this, he inhaled the fumes from black vomit, which he heated over a sand bath in a small room, and then making the residue into small pills, he swallowed it. He administered black vomit to animals, injected it into their circulation and deposited it in their tissues. As the results of these and other experiments were negative, he concluded that yellow fever was neither infectious nor contagious, and reported these conclusions in his graduation thesis in 1804.

When in 1900, during the American occupation of Cuba, yellow fever became epidemic in Havana, a board was appointed to meet in that city for the purpose of continuing the study of the disease. The members were Drs. Walter Reed, James Carrol, Aristides Agramonte and Jesse W. Lazear. The conclusions were as follows:

1. *Bacillus icteroides* of Sanarelli was shown to be practically identical with the bacillus of hog cholera, from which it differs only in the source from which it is obtained.

2. Yellow fever is transmitted by a mosquito of the genus *stegomyia*, and all attempts to bring about the infection through contact with bedding, clothing and dejecta of yellow fever

patients have resulted in failure. Hence it follows that disinfection against yellow fever is valueless.

3. Yellow fever can be produced experimentally by the injection of blood drawn in the first and second days of the disease, but this has no direct bearing upon the transmission or prevention of the disease in its epidemic form.

4. The specific germ of yellow fever is sufficiently minute to pass through the pores of a bacteria-proof filter, and it is destroyed by a temperature of 131 degrees Fahrenheit.

Confirmation of the mosquito inoculation has been furnished by Dr. Guiteras, Havana; Drs. Ribas and Lutz, as well as the French commission in Brazil, and by a commission of the United States Public Health and Marine Hospital Service at Vera Cruz. A French commission from the Pasteur Institute, working recently in Brazil, has confirmed practically all the results of the American army commission.

The Mosquito theory of yellow fever transmission is on trial in Louisiana, and upon results arrived at by sanitary officials in their efforts to stamp out the epidemic by attacking the mosquito, depends the present acceptance or rejection of the theory as a practical working basis in the warfare against yellow fever.

The infected mosquito does not become dangerous until twelve days after biting yellow fever patients, but its contagion-carrying power may last six weeks or more. The total number of cases to date (Aug. 22d) is 1,385, and the total deaths 196, 14 per cent. In 1878, at this time, there were 1,355 cases and 496 deaths, 37 per cent. The

decrease in the death rate may be accepted as a triumph for modern medical methods. Undoubtedly the Marine Hospital service, acting with the local sanitary officials, have made some progress in staying the advance of yellow fever, and the general outlook is encouraging.

Mayor Behrman, on the 5th of August, issued a statement, in which he said: "The mosquito theory is accepted by our physicians and laymen alike, and there is nothing remaining to be done but to fight the mosquito, which is being done by oiling the gutters, and screening and oiling the cisterns. . . . We have the situation so thoroughly in hand that we will very shortly convince the outside world that by working on the mosquito theory, yellow fever will be entirely robbed of all its perils. . . . This is a fight wholly against the *stegomyia fasciata* mosquito." Such statement will go far to encourage the people of Louisiana, as it does to maintain the confidence of intelligent communities elsewhere.

#### THE LATEST ADDITION.

Physicians are beginning to realize the reason they have accomplished so little in the way of influencing legislation for the betterment of sustentation and suppression of public nuisances is due solely to their lack of reorganization.

The open contempt which lawmakers express for the medical profession is based on the fact that it never has shown its power. Hence, physicians really injure themselves, as well as neglect their duty to the community, unless they do bind themselves into compact organization.

Physicians of Harrison county have recognized these facts and through the counsellor of the district, Dr. E. H. Miller, have organized the Harrison County Medical Society and become an integral part of the State Medical Association.

The following is a list of the members: Drs. A. H. Vandwert, F. H. Broyles, E. H. Bryson, C. H. Robertson, C. A. Mitchell, M. H. Eads, J. K. Chiff, C. W. Robertson, W. H. Wiley, C. J. Sellers, W. L. Stongton, A. W. Williams.

#### A NEW HOSPITAL.

The JOURNAL takes pleasure in announcing the establishment in St. Louis of a skin and cancer hospital, located on the southeast corner of Jefferson avenue and St. Charles street, consisting of a completely equipped hospital with forty beds and an out patient department, all of which is to be free of charge to patients enjoying its benefits.

The institution is founded upon the research idea for cancer and allied types of malignant diseases. Inoperable and incurable cancer cases, as well as the operable ones, will be admitted.

A pathologist, who will devote all of his time to the hospital, has been appointed and will conduct such scientific investigations as the opportunities of the hospital and clinic will permit. The following medical staff has been appointed: Drs. G. Baumgarten, N. B. Carson, J. R. Clemens, M. F. Engman, A. E. Ewing, E. C. Burnett, W. E. Fischel, Frank R. Fry, George Gellhorn, John Green, John B. Keber, F. J. Lutz, Guthrie McConnel, H. G. Mudd, Greenfield



Sluder, J. B. Shapleigh, Ellsworth Smith, Jr., Justin Steer, Fred Tausig.

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#### NEW MEMBERS.

F. H. Broyls, Bethany.  
 E. H. Bryson, Bethany.  
 B. F. Bunch, Bloomington.  
 J. K. Chiff, New Hampton.  
 M. H. Eads, New Hampton.  
 F. F. Lemon, Lincoln.  
 L. O. Mason, Bevier.  
 C. A. Mitchell, Blythedale.  
 Wm. D. Noblitt, Lively.  
 C. H. Robertson, Eggleville.  
 C. W. Robertson, Ridgeway.  
 C. E. Salyer, Callao.  
 C. J. Sellers, Mt. Moriah.  
 E. L. Stongton, Mt. Moriah.  
 L. Thompson, Macon.  
 A. H. Vandwert, Bethany.  
 W. H. Wiley, Ridgeway.  
 A. W. Williams, Ridgeway.

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The numerous friends of Dr. Woodson Moss of Columbia, ex-president of the Missouri State Medical Association, will be grieved to learn of the death of his wife, Mrs. Sarah Anderson Moss, who died on August 21st; also of the accidental death on July 28th, of his son Thomas Harris Moss, Jr., who was only sixteen years of age.

The JOURNAL voices the sentiments of the medical profession of Missouri in extending heartfelt sympathies to Dr. Moss.

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Elsewhere in this issue we publish the constitution and by-laws of the

Missouri State Medical Association. That the members of the profession may become familiar with the constitution and by-laws of the State Association, the Judicial Council recommended the printing of 2,000 copies in pamphlet form for distribution among the county societies. The secretary will forward copies of constitution in pamphlet form on request.

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#### OBITUARY.

Dr. O. B. Hicklin died at his home in New London, Mo., on June 28th. He was born near Madisonville, Mo., September 24, 1833, and was educated in the common schools of his native state. He was graduated in medicine from the College of Physicians and Surgeons of Keokuk, Iowa, in 1876, and practiced in Missouri during his entire professional life. During the civil war he served in the Confederate army under General Price.

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Dr. J. H. Stringfellow, of St. Joseph, Mo., died in that city on July 24th, aged eighty-six. Until a few years ago, when he retired from practice, he was one of the leading physicians of Western Missouri. He was graduated in 1845 from the Medical Department of the University of Pennsylvania. It is said he was the founder of the town of Atchison, Kansas, in 1854. He was a prominent figure in the troublesome times incident to the settlement of Northeastern Kansas and Northwestern Missouri.

## COUNTY SOCIETY NOTES.

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### CAPE GIRARDEAU MEDICAL SOCIETY.

Dr. H. L. Cunningham, President.  
Dr. John D. Porterfield, Jr., Secretary.

At the last meeting of the Cape Girardeau Medical Society the subject of "Obstetrics" was made the order of the evening, and the discussion was interesting and profitable.

At the next meeting a year-book will be prepared and the subjects classified for the next year. Each member will then be given a part of a subject for discussion, which he will be expected to prepare and have ready for the time when that subject is announced.

Everything points to a good society in Cape Girardeau county, and the attendance at this meeting was very good. JOHN D. PORTERFIELD, JR.,  
Secretary.

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### HOWARD COUNTY MEDICAL SOCIETY.

Dr. A. W. Moore, President.  
Dr. C. W. Watts, Secretary.

The Howard County Medical Society met at the office of the secretary in Fayette, on August 15th, the president, Dr. Moore, in the chair. Dr. N. E. Smith presented a case of urticaria pigmentosa and a case of tonsillitis, the latter in a child two years of age. Dr. P. C. Smith reported a case of fracture of femur in a child of two and one-half years. The injury was dressed with long and short splints, and the patient was reported doing well. Dr. Watts presented a case of tubercular synovitis following an attack of rheumatism in a boy

fourteen years old. Dr. Lee reported a case of embolism following puerperal peritonitis, which resulted fatally. Dr. Wright reported a case of icterus in a baby, which yielded to treatment.

Members present: Drs. Moore, McGee, Lee, N. E. Smith, P. C. Smith, Wright and Watts.

The next meeting will be held on September 19th.

C. W. WATTS, Reporter.

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### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.  
Dr. H. Will Elders, Secretary.

The Jefferson County Medical Society met in regular session at Festus, on July 24th. A large number of the members were present and all entered into a lively discussion of several important papers which were read.

On account of a railroad wreck the members from DeSoto and other towns were prevented from attending.

H. WILL ELDERS, Secretary.

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### PULASKI COUNTY MEDICAL SOCIETY.

Dr. W. L. Ragan, President.  
Dr. G. W. Orrick, Secretary.

The Pulaski County Medical Society met in Crocker, at Hotel de Wagner, on Monday afternoon and evening, July 10th. Dr. Oliver, of Richland, read a very instructive and interesting paper on "Appendicitis," which was discussed by several of the members. Regrets were expressed of the absence of Dr. Carter, of Dixon,

who had promised a paper on "Typhoid Fever." Among the visiting physicians was Dr. Johnson of Rolla, the district counsellor. The visiting physicians were delightfully entertained at supper by the resident physicians. The society adjourned to meet at Dixon, the first Monday in November.

G. W. ORRICK, Secretary.

### HOWELL COUNTY MEDICAL SOCIETY.

Dr. J. W. Bingham, President.

Dr. H. C. Shuttee, Secretary.

The Howell County Medical Society held its regular meeting on August 3. This was the annual business meeting.

Dr. Reiley led the discussion on "Refilling Prescriptions."

It was the opinion of those taking part in the discussion that something should be done to check the custom of refilling prescriptions for any one who presented a prescription to be refilled.

On motion, Dr. Reiley was appointed to secure the signature of physicians to a request to druggists asking them to agree not to refill prescriptions unless they were marked "Refill."

Dr. Shuttee led the discussion on "How Best to Handle Our Bad Accounts."

Dr. Thornburgh discussed the question of "Furnishing Medicines."

Dr. Thompson led the discussion on "Charity-Practice — How Much Should We Do?"

In the House of Delegates at the last meeting of the State Association, a motion was passed forbidding county societies carrying two classes of

members, one class paying dues for both State and county societies, others only for the latter, and not being reported as members. In order to conform our by-laws to this ruling Dr. Thompson introduced a resolution making the membership fee and annual dues \$3.00.

Adjourned to meet October 5.

H. C. SHUTTEE, Reporter.

### CHARITON COUNTY MEDICAL SOCIETY.

Dr. H. C. Tatum, President.

Dr. C. A. Jennings, Secretary.

The Chariton County Medical Society convened in regular session on the afternoon of July 27th, Dr. Kirkpatrick, of Dalton, in the chair. Minutes of the last meeting were read and approved.

This session was devoted exclusively to clinics and reports on various cases not presented.

Dr. Hawkins, of Triplet, and Dr. Jennings, of Salisbury, were requested to read papers at the next meeting, to be held on August 31st at Salisbury.

W. L. BAKER, Reporter.

### MONTGOMERY COUNTY MEDICAL SOCIETY.

Dr. J. L. Jones, President.

Dr. W. M. Wheeler, Secretary.

Montgomery County Medical Society met at Jonesburg in regular session on August 18th, the president, Dr. Jones in the chair.

On motion the regular program was dispensed with and Dr. J. Franklin Welch, of Salisbury, who was present, was invited to address the meeting. Dr. Welch responded and deliv-



ered a highly interesting talk on the "Benefits of County and State Organization in the Medical Profession." Dr. Welch's address convinced those present that such organization was for the best interests of the whole profession.

Dr. F. J. Tainter, of St. Charles, also addressed the meeting in an interesting and convincing way along the same lines.

The society then adopted resolutions in memory of the late Dr. J. F. Graves.

On motion the society adjourned to meet in Montgomery City, October 10th.

W. M. WHEELER, Secretary.

#### CLAY COUNTY MEDICAL SOCIETY.

Dr. L. J. Jones, President.

Dr. F. H. Matthews, Secretary.

The regular July meeting of the Clay County Medical Society was held in Excelsior Springs, July 31st. In the absence of the president, Dr. J. H. Rothwell presided. It has been the custom of this society for several years, to hold its July meeting in Missouri's noted health resort. The visiting members were royally entertained by the members of the society living in Excelsior Springs. Four very interesting papers were read as follows: "Diabetes Mellitus," by Dr. W. S. Wallace; "The Feeding and Medical Treatment of Children," by Dr. Frank Lightfoot; "Etiology of Syphilis, with a Few Practical Points on Treatment of Pertinary Cases of Several Years' Standing," by Dr. T. N. Bogart; "Management of Normal Labor," by Dr. J. T. Rice.

A number of interesting and unique cases were also reported.

Dr. J. M. Griffen, of Excelsior Springs was elected to membership.

A resolution thanking the members at Excelsior Springs for courtesies extended the society was adopted. This was one of the most instructive and enjoyable meetings that this society has held for years.

F. H. MATTHEWS, Reporter.

#### CLINTON COUNTY MEDICAL SOCIETY.

Dr. John Sturgis, President.

Dr. E. A. Colley, Secretary.

The Clinton County Medical Society met at Plattsburg on August 2d with a fair attendance.

A paper on "Albuminuria in Pregnancy" was read by Dr. Robt. W. Rea, in which he urged the members to be constantly on the watch for this complication, and cited a number of cases. The paper elicited an interesting discussion from the members.

Dr. G. B. Rush read a paper on "The Management of Diphtheria." The paper was to the point on treatment and prophylaxis and was discussed by Drs. Sturgis, Steckman, Winn and Rea.

Dr. Rush also reported a case of birth at six and one-half months, the infant being placed in an incubator and surviving. Dr. Rush said the temperature in incubators should not be allowed to run too high and cautioned against allowing incubator babies being fed from the breast before maturity.

The society received Dr. G. B. Rush from the Macon County Medical So-

ciety and Dr. J. W. Winn from the Platte County Medical Society.

E. A. COLLEY, Secretary.

### ST. LOUIS COUNTY MEDICAL SOCIETY.

Dr. H. G. Wyer, President.

Dr. H. T. Randle, Secretary.

The St. Louis County Medical Society held its last regular meeting at the office of Dr. C. L. Armstrong, Webster Groves. Members present were H. C. Wyer, F. E. Guibor, W. H. Townsend, R. M. Higgins, Howard Carter, S. H. Reynolds, C. L. Armstrong and H. T. Randle. The meeting was called to order at 8:30 P. M. Minutes of the last meeting were read and approved. The committee on elections and ethics reported favorably on the name of Dr. Rolla Bracy, of Wellston. Dr. W. H. Townsend presented his transfer and was elected by ballot. Under new business Dr. Carter made a motion that we postpone the regular meeting in August, and adjourn to meet again in September. The motion was seconded by Dr. Armstrong and carried. A motion was made by Dr. Higgins to change the time of meeting back to 2:00 P. M., seconded by Dr. Guibor and carried.

Dr. C. L. Armstrong read a most interesting paper on "Applied Electricity, Electrical Therapeutics, X-Ray or Roetgen Ray." He described minutely the elementary construction of the apparatus and instrument recently constructed for measuring the amount of rays used. After reading this excellent paper the demonstrations verified more than could be told. A vote of thanks was tendered Dr. Armstrong both for his

hospitality and for his excellent scientific offering.

On motion, adjourned.

H. T. RANDLE, Secretary.

### PLATTE COUNTY MEDICAL SOCIETY.

Dr. R. P. Davis, President.

Dr. G. C. Coffey, Secretary.

The regular monthly meeting of the Platte County Medical Society was held in Platte City, Wednesday, August 2d, Dr. Davis, the president, in the chair. The following members were in attendance: Drs. Alton, A. S. Herndon, F. G. Dinwiddie, A. C. Barr, R. P. Davis, E. McD. Coffey, J. M. Hale, M. H. Moore, S. Redman, G. C. Coffey.

The minutes of the previous meeting were read and approved. Several interesting clinics were presented and brought forth a liberal discussion.

Dr. A. C. Barr, of Linkville, Dr. Spence Redman, of Platte City, and Dr. A. S. Herndon, of Camden Point, were appointed a committee to cooperate with the state committee to investigate the cause, treatment and prevention of tuberculosis.

Dr. F. G. Dinwiddie, of Camden Point, read the following paper, entitled:

### MANAGEMENT OF SUMMER COMPLAINT OF CHILDHOOD.

Included under this general term we have several different conditions of disease, and while each should be treated according to its pathology and to the indications present, there is a general plan of treatment which is applicable and, I believe, necessary for all. The three principal indications are: 1. Removal of cause. 2.

Relief of nervous symptoms. 3. Promoting a normal condition of the digestive tract.

In carrying out the first there are several things to be done. It is of the utmost importance to stop all feeding at the outset for at least twenty-four hours, and even longer if necessary. When we consider that impure food is one of the main factors in the production of this class of diseases, we will readily see the necessity of this; besides, it gives rest to the digestive organs and facilitates the action of the remedies administered.

To clear the intestinal canal, which is of first importance, I prefer calomel and castor oil, if the stomach is not too irritable. At first I usually give from one tenth to one-sixth grains of calomel every half hour until six or eight doses have been given. I believe calomel has a three-fold action, for it not only stimulates the liver, but acts as a gastric sedative and an intestinal antiseptic. After this I usually give a dose of castor oil every twelve or twenty-four hours if there is a continuance of accumulation of septic material in the bowel. As heat is also one of the prime factors in the cause of these diseases, we should endeavor to keep the patient cool and comfortable. I usually instruct the mother or nurse to sponge the patient three or four times a day with tepid water, to which a small amount of soda bicarb. has been added. Keep the patient in the shade where he may have plenty of fresh air. Strict attention should be given to hygiene and sanitary measures. Another means of clearing out the

bowel and relieving irritation, is irrigation. This is especially useful when the colon is the seat of trouble. A pint of warm water, with some mild antiseptic, injected into the colon by means of a rubber catheter attached to a fountain syringe (being careful not to use too great force) used once or twice a day, will aid in carrying off the toxic products and counteract sepsis.

Before passing to the next general indication I would mention that I have found meat juice given in from ten to thirty drop doses every two to four hours, according to age and indication, will furnish all needed nourishment for several days. I allow plenty of cool water (previously boiled) given frequently and in small quantities.

In considering the treatment of the nervous symptoms we must be governed by the condition—whether it is one of excitation or depression. Oftentimes, if we would save our patients, we must look to this condition first. To a patient with bright eyes, pupils contracted and face flushed, showing active congestion of the brain, I give the *spe. tr.* of *gelsemium*, combined with the *spe. tr.* of *aconite*, every half to one hour until symptoms abate. To this may be added a few drops of sweet *spts. nitre* for each dose of the mixture. On the other hand, if the patient is in a semi-comatose condition, with cold, clammy skin, dull, expressionless eyes and dilated pupils, and marked depression, showing passive congestion of the brain, I would administer *spe. tr. belladonna* or *atropine* as being the indicated remedy.



I have also found the tinct. of passiflora very useful to allay nervous excitement in these cases.

After having cleansed the bowel thoroughly at the first, remedies to relieve irritation and to act as anti-septics, will, in the majority of cases, be found necessary in order to complete a cure. For this purpose, I believe, there is nothing better than a combination of bismuth, subgallate and salol, giving a powder containing from one to three grains each every two to four hours, according to age of patient. In a great many cases this will be all that is required, while in others it would be well to leave the patient on some good tonic to aid digestion and build up the system.

#### BENTON COUNTY MEDICAL SOCIETY.

Dr. G. S. Greeson, President.  
Dr. S. O. Davis, Secretary.

The Benton County Medical Society held its regular meeting in Warsaw on August 2d, the President, Dr. G. A. Greeson in the chair. A number of subjects were presented, in the discussion of which all the members joined. The next meeting will be held on September 6th.

The following were elected to membership: Drs. F. F. Lemon of Lincoln; A. H. P. Bohning, Lincoln; W. P. Noblit, Lively.

S. O. DAVIS, Secretary.

#### COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.  
Dr. R. S. Holman, Secretary.

Cooper County Medical Society held its regular monthly meeting at Mill-

ion Hotel, Boonville, on August 1st, the Vice-President, Dr. F. R. Smiley, in the chair.

A number of papers were read and cases reported for discussion, the meeting being a very profitable one and enjoyed by the large number of members present.

R. S. HOLMAN, Secretary,

#### MARION COUNTY MEDICAL SOCIETY

Dr. R. H. Goodier, President.  
Dr. F. Janet Reid, Secretary.

Marion County Medical Society held its regular meeting on August 4th, the attendance being very good for a mid-summer meeting. The president, Dr. Goodier, occupied the chair.

The subject for general discussion was "Summer Diarrhea." The subject of "Yellow Fever" was also discussed at some length.

Dr. J. N. Coons, honorary member, read the following paper entitled,

#### MEDICINE AS I HAVE KNOWN IT; OR FIFTY YEARS IN PRACTICE.

Mr. President and Fellow-Members of Marion County Medical Association:—My first experience in medicine left a bad taste in my mouth, my last gave me the heartache, with a feeling of "goneness" about my pocketbook.

I beg you will not ask when the first experience was had, for since Prof. Osler of Baltimore issued his ukase bulling the chloroform market I have felt a reticence in discussing time and events prior to sixty years ago.

When fifty years ago I took passage

in the medical craft I was full of enthusiasm and buoyant with hope that my life travels and studies would enable me to cure or relieve the ills of a large clientele, secure their gratitude and fill my empty bank account to repletion.

The first I realized, perhaps to the average moderation, the latter failed to come up to expectations. Notwithstanding this I have found much to cheer and pleasure me in my fifty years of arduous study and practice. The mere consciousness of work for the good of frail humanity has been a lasting comfort. Then the many kindnesses received at the hands of my medical brethren, sharing my labors in a noble cause have cheered and sustained me on the way.

And to see occasionally my hours, days or weeks of anxious but apparently hopeless effort to save a sick patient, perhaps a very dear friend, finally rewarded with success has filled my soul with gladness; and when later the convalescent came with fervent words of gratitude, as *sometimes* happened, to thank me for service rendered, emphasizing his thanks by a more liberal fee than I had named, my joy was complete and I rolled in the luxury of content.

But reverting to the practice of medicine fifty years ago, we need to disabuse our minds of any idea that our brethren of that day were deficient in intelligence or intellectuality. A careful reading of the medical authorities of that period, such as Watson or Williams of England, or George B. Wood of America, will soon convince the skeptical of their profound erudition and their powers of thoughtful logical analysis.

How then do we account for the crudities and errors characterizing the medical practice of that period? How explain the inordinate use, aye, abuse of mercurial preparations, carried often to salivation and destruction of the maxilla and adjacent structures? Why were patients bled so often and so freely? Why were so lavishly given the poisonous antimony, the deadly aconite, and other depressants generally? Why did they interdict the use of nutritious food and forbid the drinking of water in fevers, except in very limited quantities?

It must be remembered that for long years the profession had been taught and trained, often by personal preceptors, to venerate and obey the traditions of the fathers, accepting them without question or criticism. These traditions had taught that inflammation was the basic cause of all diseases, and hence the study of inflammation from its first inception in redness, heat and congestion to its final end in ulceration, gangrene, sphacelus, or more favorably in resolution, became an imperative requisite in the curriculum of all the colleges.

Again it was taught that inflammation was originated or caused by an excess of fibrin in the blood, and to reduce that excess was the way to strangulate inflammation. This reduction could be effected most quickly by blood-letting, since the first blood from venesection was heavily cupped, hence contained most fibrin. And then mercurial preparations were known to break down and destroy the fibrinous blood. Antimony and aconite had a similar effect.

But on the other hand, rich food with free use of water restocked the



blood with fibrin. Hence these must be denied.

If now we call to mind the well-known fact that at this period there prevailed an inflammatory cycle in disease, the above practice is readily accounted for on the well-assured principle, "*Contraria contrariae curantur.*"

Of course in the light of the present day, and with our newer pathology and our improved armamentarium of remedies, such treatment would not be tolerated. Moreover, disease at the present day, instead of inflammatory, tends more toward a typhoid type, requiring supporting or stimulating treatment. We have also learned in the long years since that the more vigor we can develop in the sick and weakened body by food and stimulants the greater power it has to resist and overcome disease.

But why, and what has brought about the changes in medicine in the last half century?

The frequent and sad effects of calomel in destruction of the maxilla and disfigurement of the face, the horror felt by many at the sight of blood in venesection, not to mention the pain of the lance-thrust, the natural disgust at the bitter and offensive taste of the huge doses—often tablespoon doses—of such drugs as powdered peruvian bark, led many people to readily accept any fad that promised relief. Hence the quick and popular acceptance of homeopathy, hydropathy, eclecticism and the like.

Moreover, the more independent thinkers in the regular profession began to look about for other means of combating disease.

Dr. W. C. Norwood brought forward his saturated tincture of *veratrum viride*, claiming for it that it bled the patient into his own blood-vessels without waste of the vital fluid; that it was a reliable heart sedative and depressant, and absolutely safe if given prudently. Dr. H. C. Wood verified his claim, and whilst the regulars fought viciously against its use, yet it gradually supplanted the lancet and aconite.

Dr. Bartholow, then of Cincinnati, the hotbed of Eclecticism, noted the good effects of many of the vegetable extracts that the Eclectics had introduced, and had the courage to use and commend them. His influence brought forward podophyllin, aloin, leptandrin, and other agents, as useful substitutes for calomel in many diseases, and gradually we learned that one-tenth to one-half grain doses of calomel were often more serviceable than the former dose of ten grains, and infinitely less harmful.

Dr. Austin Flint, witnessing, while in New Orleans, the depressing and disastrous effects of long-continued heat, inveighed against the depressant treatment of disease then in vogue; adopted for himself, and strongly commended to others, a tonic-supporting and stimulating treatment. Other medical men tried it, and with such satisfactory results that often, since, it has been carried to extremes.

In the meanwhile the wholesale pharmacists set their forces to work to discover and extract the active principles of vegetable agents, and by sugar-coating pills and dissolving bitter extracts in palatable excipients, to meet the popular demand for pleasant-tasting medicines.



H. C. Wood, of Philadelphia, and a few other notable physiologists, engaged in the work of testing the physiological effects of the various agents of the *Materia Medica*, first upon animals, and then tentatively upon man, gradually eliminating the worthless and those of little value, and establishing in the confidence of the profession many new agents, both vegetable and mineral, often proven to possess powers hitherto unknown.

It thus came about that our *Materia Medica* is now being reduced to a physiological or scientific basis of acceptable and palatable medicines, upon which we can safely rely for effect.

If now, in addition to the above, we reflect upon the superiority we have gained in diagnosis by the discovery and use of the many instruments of precision now known (as the clinical thermometer, the hypodermic syringe, and the like), that were unheard of fifty years ago, we shall not be surprised at the fact that the death rate has been greatly lessened, and the average longevity greatly extended, and this, too, without reflection upon the labors of our predecessors in the profession, who were so handicapped with an uncertain and unreliable *Materia Medica*, and a lack of instruments of modern invention for diagnosis, or for administration of medicinal agents other than by mouth, and had never even heard of the germ theory of disease, nor of the serum antitoxic treatment.

In the light of these facts, it behooves the medical profession of the present day to honor themselves and those who have preceded us, by push-

ing forward the grand work of perfecting our *Materia Medica* and reducing it to a positive scientific basis.

We must eliminate all foreign, inert material, crude and worthless elements, abstract the very essence, separate and simplify the active principles, and thoroughly test them, so that full reliance can be placed on their strength and physiological effect. And then we must put them in pleasing and palatable form.

This done, we must not accept the *ipse dixit* of any man, however high his repute, as to any branch of medicine, till after full verification by careful experimentation.

Criticism in medicine is a Christian duty. When the life of a fellow-man is at stake, we dare not neglect any precaution to know that we are right. Precedent here is a good thing only after every possible test of its correctness.

In medical practice, as in war, the more concentrated and powerful the force, and the more directly applied to the object to be subdued, the better the result. Yet it must not be forgotten that there is danger in handling high explosives, unless skill and circumspection be combined in the engineer.

Once armed with powerful medicinal agents, in concentrated and palatable form; armed, also, with a critical knowledge of the precise effect of each agent; and, further, with a broad, yet accurate and precise, diagnosis of disease, verified by every possible instrument of precision; and, most important of all, by an educated appreciation of its exact pathology—then, and then only, can we say that

medicine is truly on a scientific basis.

Should this high standard ever be attained—and all our energies should be directed to this end—the world's plaudits will be justly ours.

### KNOX COUNTY MEDICAL SOCIETY.

Dr. S. M. Brown, President.

Dr. H. J. Jurgens, Secretary.

The regular meeting of the Knox County Medical Society met on August 7, 1905, the president, Dr. Brown, in the chair. Six members present. The secretary being absent, Dr. St. John was appointed secretary pro. tem. Reading of the minutes was dispensed with.

Dr. Arnett, of Novelty, was invited to discourse upon the "Etiology of Typhoid Fever" as per program arranged at the previous meeting. Discussion by Dr. Northcutt brought out further items in regard to the communicability, but as this also came under Dr. Leeman's share in the program, on motion of Dr. G. Brown, Dr. Leeman took up the subject. His paper on "The Communicability of Typhoid Fever" was deeply interesting, especially with regard to the various infections and modes of entrance into the system. Dr. Northcutt responded to the portion on the program entitled "Symptomatology, Direct and Differential," this subject being well and ably handled, particularly respecting the more dangerous symptoms including the pulse, temperature and hemorrhages. Dr. Jurgens being absent, the paper on "Pathology and Bacteriology" had to be omitted much to the disappointment of the members. Dr. Geo.

Brown then gave a practical, pithy and cleverly outlined role for "Treatment by the Country Practitioner," this being his allotted portion on the program.

It is in this especial part of the symposium that any and all condensed, practical and well tried methods of treatment prove of deep interest and value to the members of any county medical society and should be encouraged to the utmost. This was manifested and deeply appreciated by our members during the very amicable and social discussion ensuing upon the various papers read.

The criticisms were all well received and cordially replied to, especially the mention of the oil of cinnamon and turpentine. Dr. St. John read a clipping from the *Journal of the A. M. A.* on the new methylene blue test as being cheaper and equally as reliable as the Ehrlich diazo test. The Woodbridge treatment was canvassed but met with poor consideration and was rather doubted as in any way more efficient. Quinine was also discussed as a tonic. Phenacetin, sulfonal and other drugs came in for discussion. The majority of the coal tar preparations were discouraged.

The president who has had an experience of thirty years in treating typhoid fever, praised the symposium in its entirety, thanking the participants cordially, and declared that the sentiments expressed met with his hearty approval. The prevailing idea in the treatment being as little medication internally as possible, sanitary disinfection, hygienic and dietary measures, to conduct the patient through as well as possible.



Dr. Myers and Dr. Jurgens arriving previous to the close of the session, took part in the discussion.

A motion was offered and seconded that the members present their papers, as read, in suitable form for preservation by the secretary and made a part of the records.

Moved and seconded by Dr. Arnett that the president and secretary appoint subjects and notify the various members who are expected to take part in the next meeting. Moved and seconded that a vote of thanks be accorded the members taking part in the symposium.

Moved by Dr. Jurgens and seconded that the outside members and ladies be invited to arrive in time and be dined by the local members at the next meeting.

H. J. JURGENS, Secy.

#### WAYNE COUNTY MEDICAL SOCIETY.

Dr. J. P. Sebastian, President.

Dr. R. J. Owen, Secretary.

The last meeting of the Wayne County Medical Society was held at Patterson on July 29th. Heavy rains in the county rendered the roads almost impassable and the attendance was therefore light.

The meeting was called to order by the president. Applications for membership were received from Drs. Jesse W. Hale, of Greenville, and C. H. Jones, of Brunot. These were accepted and their names enrolled.

There being no scientific program prepared, discussions in an informal way were entered into by the members on the following subjects: Puerperal convulsions, placenta previa, puerperal peritonitis, post-partum

hemorrhage, pelvic cellulitis with treatment of resulting abscess. Dr. S. A. Bates reported a case of intussusception in a baby which ended fatally.

A motion was made and carried expressing the thanks of the meeting to Dr. Sebastian and family for their hospitality.

The next meeting will be held at Mill Spring on September 29th.

R. J. OWENS, Secretary.

#### ST. CHARLES COUNTY MEDICAL SOCIETY.

Dr. J. R. Mudd, President.

Dr. B. Kurt Stumberg, Secretary.

The last meeting of the St. Charles County Medical Society was held at St. Charles, June 6th, Dr. J. R. Mudd presiding. Roll being called, the minutes of the previous meeting were read and adopted.

The secretary read the constitution and by-laws of the State Medical Association. These were altered in a few minor details and adopted by the St. Charles County Society.

The treasurer's report was read and accepted.

There being no papers nor interesting cases to report the society proceeded to the election of officers. A motion was made and seconded that the election be by acclamation. The motion carried.

The result of the election was as follows:

Dr. J. R. Mudd, president; Dr. F. P. Dunn, vice-president; Dr. B. Kurt Stumberg, secretary; Dr. Carl Bitter, treasurer; Dr. O. Morgner, censor; Dr. W. Hardy, censor; Dr. B. Wenter, censor.

A resolution was adopted to send



greetings from the society to Dr. C. M. Johnson. It was decided to pass the next regular July meeting and that the next meeting be held the first Tuesday in October.

An application from Dr. Corley was

received and referred to the censors.

There being no further business before the society, a motion for adjournment until October, was made and passed.

B. KURT STUMBERG, Secretary.

## NEWS ITEMS.

Davies County Medical Society was unable to hold its regular quarterly meeting in July, on account of bad weather. The next meeting will be held in Gallatin, October 10th.

Cole County Medical Society was unable to transact any business at its last meeting on account of lack of quorum. A number of members were away from their homes, attending meetings and on vacation trips. The next meeting will be held on October 2d.

The Board of Health of St. Louis is considering the establishment of a dispensary at the City Hospital. A bill will be introduced in the municipal assembly providing for the dispensary.

Dr. Fred Watts, of Perry, was appointed to represent the Ralls County Medical Society on the scientific program for the next annual meeting.

Permission was recently asked of the board of councillors in a town in New York state, for the establishment of a sanatorium for tuberculosis. Statistics were quoted to demonstrate that hospitals for the treatment of tuberculosis are not a menace to the public health. Despite the figures, when

the matter was put to a vote, there was only one affirmative ballot cast, and the enlightened citizen who cast the ballot was an undertaker.—*Medical Record*.

Dr. T. D. Crothers, of Hartford, Conn., superintendent of Walnut Lodge Hospital, has accepted an invitation to deliver the first oration in the Norman Kerr memorial lectureship at London, England, October 10, 1905. Dr. Kerr will be remembered as an eminent London physician, who made a special study of inebriety, alcoholism, and other drug disorders. He wrote several excellent books on this subject, and was instrumental in securing the enactment of laws for the control of inebriates, and the promotion of hospitals for their care throughout Great Britain. He founded the British Society for the Study of Inebriety, in 1884, and this society and his friends have organized a memorial lectureship, for yearly orations on his life and work. It is a very pleasant recognition of the progress of medical science in this country, that an American physician should be invited to deliver the first lecture.—From the *British Journal of Inebriety*.

The eighteenth annual meeting of the Medical Society of the Missouri

Valley was held in Council Bluffs, Iowa, on Thursday and Friday, August 24th and 25th, under the presidency of Dr. S. Grover Burnett, of Kansas City.

The Grand Hotel had been selected as headquarters, while the sessions were held in the Auditorium at Lake Manawa, a beautiful resort near the city. This afforded a cool and comfortable place to enjoy the scientific program, which was much appreciated. The evenings were devoted to the various forms of amusement found at this park. Following is a list of the papers:

"Discussion on Diabetes," led by Dr. LeRoy Crummer, Omaha.

"Discussion on Pulmonary Tuberculosis," led by Dr. J. W. Kime, Fort Dodge, Iowa.

"Carelessness in the Use of the Curette," Herman E. Pearse, Kansas City.

"Treatment of Patients After Intra-Abdominal Operations," Daniel Morton, St. Joseph.

"Practical Facts About Hernia," L. A. Todd, St. Joseph.

"Four Cases of Essential Anemia, and Their Differentiation," W. O. Bridges, Omaha.

"Some Observations on Carcinoma of the Large Intestine," A. P. Condon, Omaha.

"Clinical Importance of the Diplo-Bacillus of Morax-Oxenfeld," Harold Gifford, Omaha.

"The Prevention of Deformity," J. P. Lord, Omaha.

"Bodily Weight as a Factor in Prognosis in Nervous and Mental Disease," Frank Parsons Norbury, Jacksonville, Ill.

Some Non-Septic Causes of Fever After Labor," Mary Strong, Omaha.

"The Pharmacology of Antipyretics," A. L. Muirhead, Omaha.

"Ectopic Gestation, with Report of Cases," O. Beverly Campbell, St. Joseph.

Paper, W. O. Henry, Omaha.

A cordial invitation is extended to the profession.

Dr. Chas. Wood Fassett, St. Joseph, is secretary.

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At a recent meeting of the board of directors of St. Luke's Hospital, the following medical staff was elected: Drs. Harvey G. Mudd (chief of staff), G. Baumgarten, Walter Baumgarten, E. C. Burnett, M. B. Clopton, A. E. Ewing, W. E. Fischel, F. R. Fry, George Gellhorn, Joseph Grindon, Willis Hall, M. H. Post, J. B. Shapleigh, Greenfield Sluder, A. E. Tausig, Geo. M. Tuttle, Jules F. Valle, P. G. Robinson, L. P. Butler, J. Campbell Smith, W. A. Shoemaker, W. G. Moore, W. B. Outtem, Leon Straus, Roland Hill, V. P. Blair, J. Young Brown, Nathaniel Allison, J. W. Charles and B. W. Moore.

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Plans are being prepared for a new hospital, to be added to the various Bethesda institutions in St. Louis. The institutions now operating under the Bethesda auspices are the Hospital and Home for Incurables, the Old Ladies' Home, the Home for Foundlings, and the Maternity Home. The new building will be devoted to the Maternity Home, the quarters now occupied by this branch being inadequate, and not up to the requirements for modern treatment.



# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	G. W. Lott	Ulesboro	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Kenoma.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas. W. Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	C. C. Leeper	Braymer	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	E. P. Potterfield	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Chariton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Platte City.
Cole	J. P. North	Jefferson City	G. E. Etmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	R. S. Holman	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	J. A. Asher	Trenton	W. D. Fulkerson	Trenton.
Henry	Jno. H. Britts	Clinton	F. M. Douglas	Clinton.
Holt	B. T. Quigley	Mound City	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	S. Brown	Edina	Henry J. Jurgen	Edina.
Laclede	J. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	E. S. Smith	Macon	G. B. Rush	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmoro	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman	Ulman	G. D. Walker	Eldon.
Mississippi	A. J. Martin	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	J. W. Lamson	Neosho	Horace Bowers	Neosho.
Nodaway	J. A. Larrabee	Barnard	F. R. Anthony	Maryville.
Pemiscot	D. B. Crowe	Caruthersville	J. G. Luten	Caruthersville.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
Phelps	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Quick	Crocker.
Putnam	C. H. Carver	Hartford	T. A. Townsend	Unionville.
Ralls	O. B. Hicklin	New London	T. J. Downing	New London.
Randolph	G. O. Cuppaidge	Moberly	W. M. Dickerson	Renick.
Ray	Chas. B. Shotwell	Richmond	L. D. Greene	Richmond.
Reynolds	J. M. Lowery	Centerville	T. W. Chilton	Corridon.
Saline	D. C. Gore	Marshall	F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	A. A. Gossow	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	H. C. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	J. C. Kessenger	Milan	J. S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City.
Washington	J. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	L. M. Pettit	Greenville	I. N. Barnett	Piedmont.



# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Monthly. Second Tuesday.
Carter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday, April, July, October, January.
Daviess .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. First Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Monthly.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Henry .....	Monthly. Second Tuesday.
Holt .....	Quarterly. January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Semi-Annually. First Mondays May and November.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Monthly. First Wednesday.
Macon .....	Monthly. On or before full moon, Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Monteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Monthly.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
St. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.

President-Elect: WM. J. MAYO, Rochester, Minn.

President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

President: D. C. GORE, Marshall, Mo.

Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, Laclede; F. A. GLASGOW, St. Louis; T. F. LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

## COMMITTEES.

Committee on Scientific Work.

C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.

Publication Committee.

C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes; W. B. Dorsett.

Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, Lewis.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Fayetteville. Counties: Clay, Ray, Platte, Clinton, Caldwell, DeKalb, Gentry, Harrison, Worth, Daviess.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: Bollinger, Scott, Madison, Cape Girardeau.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Hickory, Cooper.

Fourteenth District.—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Dade, Barton, Cedar, Vernon.

Sixteenth District.—R. L. Johnson, Rolla. Counties: Dallas, Crawford, Phelps, Pulaski, Laclede, Dent.

Seventeenth District.—J. E. Tefft, Springfield. Counties: Greene, Christian, Stone, Barry, Lawrence, Webster, Polk, Taney.

Eighteenth District.—H. C. Shuttee, West Plains. Counties: Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

\*Counties in black type are unorganized.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

VOLUME II.

OCTOBER.

NUMBER 4

## ORIGINAL ARTICLES.

### A CLINICAL STUDY OF THE DIAGNOSIS OF URINARY CALCULUS.\*

BY BRANSFORD LEWIS, M. D., St. Louis.

*Diagnosis of Stone in the Bladder.*—We are all familiar with the classical symptoms of stone in the bladder. The frequency of urination that is prone to occur in the day time, while the patient is up and about, agitating the foreign body within the organ and increasing the irritation that subsides so markedly when the patient rests quietly in bed (this in contradistinction to the frequency from prostatic hypertrophy that occurs especially at night); the common occurrence of blood in the urine, especially at the end of urination; the characteristic stream, suddenly interrupted by the falling of the stone over the vesical outlet, plugging it completely and at once, permitting the renewal of the stream only when it is floated or jolted out of the way; then the resumption of the full stream, unless again suddenly interrupted in the same manner. When such typical symptomatology is followed by

investigation with the stone-searcher, and the click and grating feel are obtained, the diagnosis is certain, and one almost wonders how it is ever possible to overlook or be misled about the diagnosis of a condition so clearly and distinctly defined; and one would hardly expect to meet with a case in which a stone as large as the one I herewith present for your inspection (Fig. 1, No. 34,) had been left in a bladder, unsuspected, only two weeks before I first discovered and removed it; yet such is the fact. The patient was not only assured by the gentleman who had him in charge that his bladder was free of any foreign content, but he was strongly advised against consulting a "specialist," in his search for relief, as a specialist would certainly "want to operate on him, instead of curing him without operation, as should be done."

A brief history of the case is as follows:

*Case 1.*—G. M. W., male, aged seventy years at the time of first conference

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on October 22, 1903. Some time during 1900 the patient began to note hesitancy and slowness of his stream, together with increased frequency of urination, especially at night. In August, 1901, while at Chautauqua, New York, there was sudden and severe difficulty in urinating, requiring the use of the catheter for a week or more. His condition was then considered so serious that he was sent to Buffalo, New York, where Dr. Phelps opened the bladder supra-pubically and drained it for three months, which secured much improvement. In 1903, at Lincoln, Nebraska, he had another attack of difficult urination, chills, fever, suppression of urine and unconsciousness for twenty-four hours (uraemic?). He was catheterized and irrigated regularly for several weeks, and incidentally was examined by the surgeon in charge, who told patient that there was enlarged prostate, but that further than that the bladder was clear. Two weeks later he came to St. Louis.

When he came to see me he was emaciated, weak, pale, and hardly able to walk. He was passing large quantities of pale urine, 1003 specific gravity, containing much pus and albumin, and several forms of casts. Physical examination showed a very considerably enlarged prostate, about five ounces of residual urine. The soft rubber catheter was obstructed on reaching the prostatic region; but the metal catheter of full curve entered the bladder, and on manipulation detected the gritty feel of a stone of good size.

While it was evident that some operation had to be undertaken to remove the stone, it was also apparent

that any endeavor of that kind had to be minimized as much as possible, else the old gentleman would not stand it.

After a week's preparatory treatment, on October 28, 1903, under *local anesthesia*, by means of infiltration fluid, I made a supra-pubic incision into the bladder and removed the large stone which I now present. Its dimensions are  $2\frac{1}{8} \times 1\frac{1}{2} \times 1\frac{1}{4}$  inches, and weight 13 drams and 23 grains. On opening the bladder about two ounces of pus flowed out of the stone-pocket in the upper portion of the bladder. During the operation the patient was, of course, entirely conscious, but the anesthesia was so successful that he did not complain at all, in which respect he was very agreeably surprised, in that he had been very nervous and anxious as to the suffering which he thought could not be avoided.

Nothing was done about the prostatic obstruction at this time, except that it was felt to be caused by a prostatic bar at the posterior commissure. Complete drainage was established by means of two soft rubber catheters tied into the supra-pubic opening, with a continuous stream of saline solution running for the first twenty-four hours, and interruptedly thereafter for a few days. There was no depression from the operation; on the contrary, he became free from pain for the first time in two years, he said, and he was soon sitting up in bed, and then around the room. He visited my office in just three weeks after the operation, and had in the meantime regained much strength and spirit.

With the marked obstruction pre-

sented by the enlarged prostate there was little or no chance of the suprapubic fistula closing, or of even approximate restoration of the urinary tract to normal; therefore, the effort at clearing up the obstruction was next considered. It was realized that the patient could not withstand much or severe operative interference; and since the obstruction was in the shape of a bar, it was possible that a Bottini incision would accomplish the opening up of the channel. Again, under local anesthesia, on December 8, 1903, a generous posterior electroincision was made by the Freudenberg cautery; no pain or hemorrhage incidental to it. A few days later there was some gastric reaction, and temperature elevation to 103. The opening of the urethral passage was demonstrated by filling the bladder through the upper opening and allowing the patient to pass it out the normal route—which he did in a good, full stream. Sounds were passed occasionally. With assistance of some renewal of the wound-edges and closure with the French metal stitches, the supra-pubic opening later healed, after which the patient recovered his ability to urinate voluntarily in a full stream and completely empty his bladder. He has been doing this for more than a year, now; has recovered his general health, has taken trips both east and west, and lives in a comfortable manner, as he pleases, free from all urinary troubles.

The overcoming of the difficult conditions by operating in successive steps and without the use of general anesthesia, were both conservative and successful. He would probably not have lived through a more heroic plan of

action; and a non-operative plan would not have secured any but temporary benefit, adding nothing to his fast-diminishing lease on life.

Some surprise may be occasioned by the fact that the bladder was sounded and so large a stone as this not found, hardly two weeks before his arrival in St. Louis. It is probable that the sound did not enter far enough into the bladder to reach the stone; that its entrance was impeded by the large lobes and bar of the prostate, leading to the false conclusion that the viscus contained no stone.

The next case related is one that gave me a history strongly suspicious of calculus in the bladder, and with that suspicion in mind I examined with the stone searcher and failed to find the object of the quest; nevertheless, on applying additional methods of investigation I was successful in finding this stone, which I show you, and removed at a later date. (Fig. 1, No. 38.)

This, by the way, is quite a peculiar stone, a stone of crystallization, the whole surface being covered with sharp pointed spiculæ, of pure crystal formation like quartz, and it is no wonder, therefore, that the patient's most urgent complaint was with reference to the severe pain that occurred for fifteen minutes or a half-hour after each urination, often requiring him to lie down for that length of time for relief. The spiculæ acted as so many thorns against the tender and inflamed mucous membrane of the bladder, especially at the end of urination, when the bladder became empty and contracted on them. I have never seen another stone of this formation.



*Case 2.*—T—e J—n. Aged fifty-seven, male. First conference March 16, 1904. German; married; merchant. For the last three years this patient had suffered from pain in the perineum, both during and after urination, and also on experiencing a jolt or jarring or rapid walking. This pain had gradually increased in severity until the patient could hardly attend to his regular duties. He had not noticed blood in the urine, although he had observed some sediment. He had noticed sudden stoppage of the stream, starting again later after waiting a few minutes, or on walking around the room. He had to urinate frequently, both day and night, but the most emphatic complaint was of the pain directly after urination; also, there was slowness in starting and difficulty in the passage of the urine. There were seven ounces of residual urine at the time of the first examination with the soft rubber catheter which entered the bladder easily. While this history gave rise to strong suspicion of stone, none was felt on introducing the Thompson searcher into the bladder, but when the retrograde cystoscope was placed in the bladder, it showed a beautiful picture of a rough, jagged stone of considerable size, lying deeply in the *bas fond*, behind the posterior commissure of the prostate. When this stone was removed by a perineal incision on March 23d, at St. John's hospital, it was readily seen why so much pain should have been experienced. It was covered with a number of sharp spiculæ, pointing in all directions. It was closely attached to the bladder mucous membrane, so

closely in fact that it was removed from its nest with considerable difficulty and danger of tearing the mucous membrane. While it was being removed the finger had to be inserted through the perineal opening to peel the mucous membrane from the stone. It is the roughest stone, and most irritating in its character, that I have ever observed. One can readily imagine the amount of pain that would be occasioned by the contracting together on it, of the bladder walls.

Following the operation there was satisfactory recuperation and the patient has been relieved of his pain and many symptoms, and has regained completely his general health.

In this case, no obstruction was found connected with the prostate, so that no operating had to be done on that organ.

That a stone of moderate dimensions may be of slow growth, and exist a long time without being discovered, the patient meantime passing through the hands of a number of the profession in different parts of the country, is illustrated in the case from whom I removed the accompanying stone. While no difficulties were presented in the detection of the stone by means of the searcher in this instance, and it might have been found as easily by anyone of those who saw the case previously, it is a fact that he had never been examined for stone before his first interview with me.

*Case 3.*—G. D. R—d, of Keokuk, Iowa, aged sixty-four; banker, American, married. Referred by Dr. Payne, of Keokuk, Iowa.



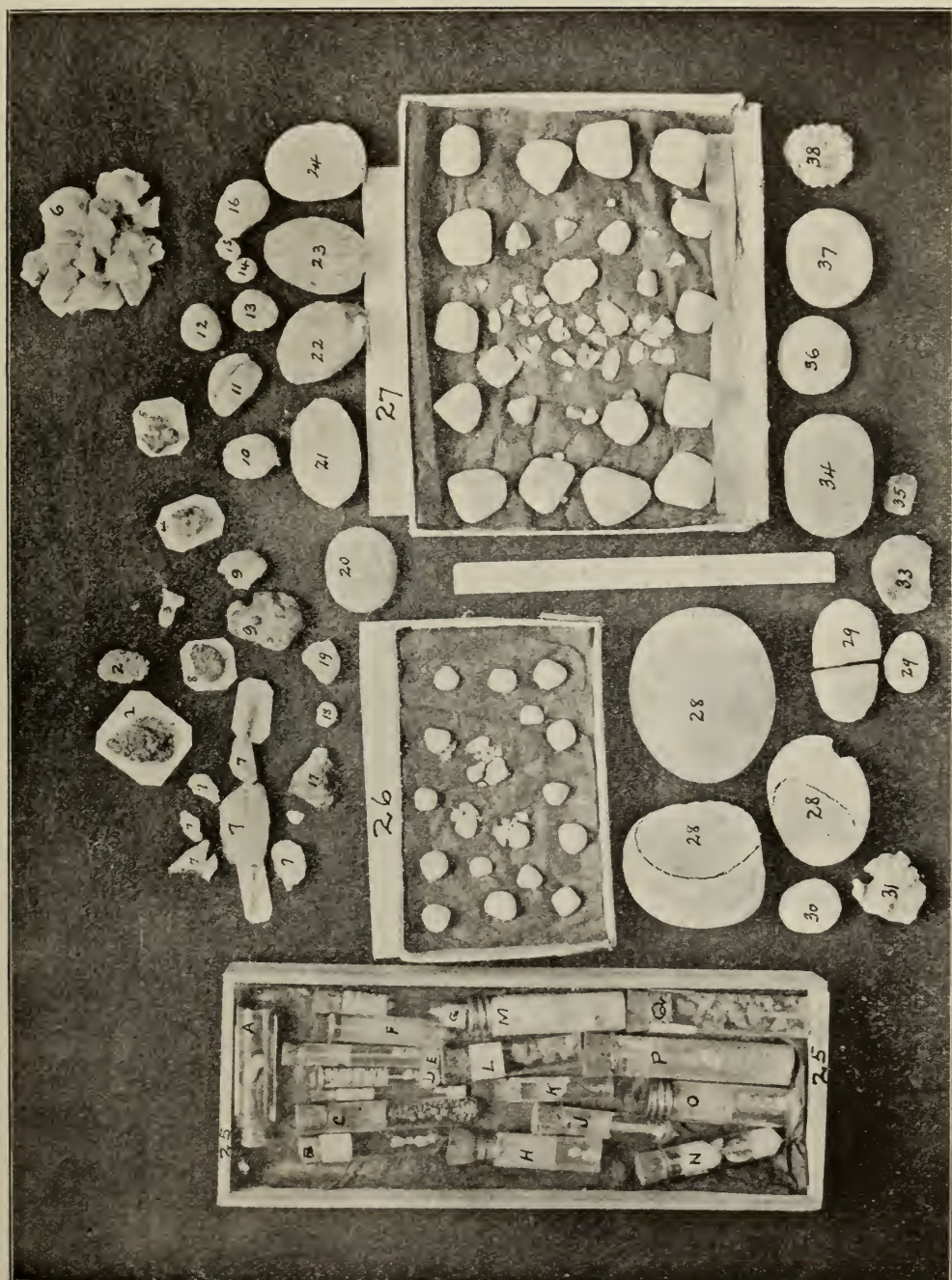


FIG. 1.—Dr. Lewis's collection of Urinary Calculi, reduced to one-fourth natural size.



Symptoms in this case began four years before his first conference with me on July 13, 1903.

The symptoms were initiated by irritation in the bladder, that at first was only temporary, after which there was no trouble for six months, when there was a renewal of the irritative symptoms and clouding of the urine. Then Dr. Payne used boric acid solution as a bladder-wash for a time. Last fall he went to a sanitarium in Milwaukee, Wisconsin, where the bladder was washed regularly over a considerable period. On account of difficulty in urination, he had been using a catheter for the most part of the past year, drawing his urine off from three to six times in twenty-four hours. Physical examination showed no enlargement of the prostate, refuting what had previously been accepted as the diagnosis in this case. The stone-searcher readily came in contact with the calculus in the bladder, clearing up a diagnosis that seems to have been obscure for a considerable length of time. Operation July 13, 1903, by a perineal incision; the finger introduced into the neck of the bladder showed a marked contraction at the bladder neck—to such a degree that I could hardly enter the organ with the finger. To do away with this, the uterine dilator was introduced into the neck of the bladder, and successive stretchings did away with the narrowing at that point. After this, the forceps was introduced into the bladder, and the stone readily removed. (Fig. 1, No. 36.) Double catheter continuous drainage was maintained as usual for twenty-four hours, after which it was interrupted and then removed alto-

gether in about five days. There was union of the wound and prompt recovery on the part of the patient, who regained his health and spirits.

*Case 4.*—F—k Z—n, St. Louis, aged forty years; engineer; German-American; married. Referred by Dr. H. M. Pierce, of St. Louis. First conference December 4, 1903.

One year previous to his coming, the patient first began experiencing the symptoms which gradually increased until the time of the final operation. They began with frequency and urgency in urination. The passage of urine usually gave considerable relief with the exception of some after-burning. Sometimes he found small clots of blood, but never bloody urine. The pain was most marked in the lower gluteal regions along the bottom of the penis. There was never any pain in the kidney or ureter regions, except one time when there was a sudden severe pain in the left lumbar region.

Three weeks before our first conference, the patient passed five little stones in one morning and three in the afternoon. Then, a week later, five more, and each day afterwards some passed. Altogether, he thinks, about twenty-five small calculi were passed voluntarily. A soft rubber catheter readily passed into the bladder, draining about one ounce of residual urine, cloudy and containing pus and blood. There was excruciating tenderness of the urethra and bladder. A stone-searcher detected a slight but definite stone click. Cystoscopy under cocaine anesthesia revealed a stone with phosphatic incrustations, a stone about the size of a hickory nut.



Under chloroform anesthesia, on December 16, 1903, the bladder was entered through the perineal incision. The neck of the bladder was found to be much contracted and was forcibly dilated by means of the uterine dilator. A stone was readily felt and removed. (Fig. 1, No. 37.) A soft rubber catheter was left in for drainage, after which there was prompt and satisfactory recovery, complete disappearance of the symptoms that had persisted for more than a year previous to the operation, and regaining of perhaps sixty pounds in weight, with considerable improvement in general health.

*Case 5.*—Chris C—n, of Missouri; aged fifty-eight; German; married; obstructive hypertrophied prostate and multiple vesical calculi.

This is another case in which there was both enlarged prostate with obstruction and multiple calculi, and yet the symptoms began only six months before his first consultation with me. He arrived September 26, 1904. Six months previous he first noticed blood in the urine, and pain in the back in both lumbar regions, radiating forward into the testicles.

At first the attacks of sharp, cutting pains would last only a minute or two, but later they became more severe and more prolonged, finally rendering him unable to pursue his work. At one time he passed two small stones through the urethra, and a week later he passed another stone. He gives the history of sudden stoppage of the stream in the course of urination. This history was very strongly suspicious of stone in the bladder, and yet when I put the Thompson searcher into the bladder I could feel no click.

I tried the same with the bladder empty, and later while it was filled with fluid, but in neither case could I detect the click of the stone. It was observed, however, that the searcher was rigid and badly borne, so that perfect examination with this could not be carried out. Under cocaine anesthesia, the next day at the Deaconess Hospital, examination by means of our retrograde cystoscope showed as plainly as could be, stones in the bladder, the largest the size of a pigeon's egg.

On October 6th the perineal incision was made into the bladder, and the prostate was first attacked. It was found to be exceedingly dense and hard, and no point of cleavage for enucleation could be discovered; consequently it was fairly tunneled through by means of biting forceps and periosteal elevator and scissors. Finally, a good-sized channel was made through the prostate, after which, by means of a stone scoop and forceps, three stones were found and removed from the bladder. (Fig. 1, Nos. 18 and 19.) Double drainage was maintained continuously for the next twenty-four hours. There was gratifying and rapid improvement, with no tendency towards contraction of the prostate urethra.

The patient within three weeks was passing a good, free stream, and completely emptying his bladder, leaving no residual urine therein. He returned to his home entirely comfortable, and his general health has improved accordingly since that time.

My failure to detect the stones in this case with the searcher was due mainly to the interference offered by the prostate in the rigidity with which

it held the instrument, and also the acute tenderness of the urethra and bladder. Under chloroform anesthesia it is probable that they would have been felt by the searcher. It is worthy of note, however, that the retro-spective cystoscope, which showed the stones plainly without touching them, did so without chloroform anesthesia. Under proper precautions the use of the cystoscope is not attended with more pain than that incident to the passage of a metal sound. The searcher is not more painful *in its passage*, either, but to be effectual for its purpose it must have freedom of movement within the bladder; it must *feel* the object, whereas the cystoscope has but to bring it within the field of vision from afar, so to speak.

*Case 6.*—J. D. M—e, St. Louis; male, aged fifty-five; American; married. Referred by Dr. Wheeler Davis of St. Louis. First consulted me January 1, 1905.

Notwithstanding the large number of calculi found in this patient's bladder, when he was examined, the symptomatology, as described by him, began only six months before the time of his first conference with me on January 1, 1905.

He first noticed difficulty in urinating, together with undue frequency of the act. He soon found it necessary to use a catheter, and, for three months, he had been using it three or four times daily. Two months before he had found three small pieces of stone in one day; none since that time. There had been no blood in the urine.

Five weeks ago, while driving a wagon, he was hit by a street car and knocked forty to fifty feet, since

which time the bladder symptoms have been more severe than previously.

A soft rubber catheter was daily introduced into the bladder and drained four ounces of residual urine. A metal instrument readily gave the stone click. The retrograde cystoscope showed as many as six calculi, although we were unable to say whether there were more than that in the bladder.

On January 4th, under chloroform anesthesia, a perineal incision was made into the bladder, the neck of which was stretched with a uterine dilator, after which, by means of curved stone forceps, stone scoop, etc., eighteen calculi were rapidly removed from that organ. (Fig. 1, No. 26.) The stones varied from the size of a pea to that of a hazelnut. At the same time it was noticed that the prostate projected into the bladder from the posterior and lateral aspects, and these parts of the gland were removed through the same incision. Continuous irrigation by two soft rubber catheters was kept up for the first twenty-four hours.

The patient rapidly improved, and within two weeks was feeling better than he had been for a number of months previous to the operation. He had at the time of his first consultation been meager and weak, and possessed of very bad color. A month later he had improved in all these respects, and he has gone back to his work. The perineal opening has healed, and he has gained thirty pounds since the operation.

The next case to be related is remarkable from several standpoints. He had a remarkable number of



stones, of considerable size, in his bladder; was the subject of obstructive hypertrophy of the prostate to a marked degree; and was humpbacked (kyphotic) to an extent that, in connection with his generally debilitated health, seemed almost to preclude any sort of operative interference; and, finally, after having opened the perineum, and taken out a number of stones from the bladder—having a direct avenue of approach through this perineal opening—by using the sound or stone-searcher I was unable to feel them, although there were *five more stones in the bladder at the time!*

*Case 7.*—W. S. McC., aged fifty-five; traveling salesman. When he arrived for first conference, the patient was so debilitated and nervous that, practically, no examination could be made; he was, therefore, simply questioned and referred to the hospital, where he recuperated under the internal and local antiseptic measures applied and the rest he was made to take, after which a sound introduced readily gave the stone-click, and the cystoscope disclosed multiple calculi—so many that I hardly believed the evidence it gave. An x-ray photo was taken by Dr. Carman, which shows the stones *en masse*, about the size of a closed fist.

On August 5, 1904, under chloroform anesthesia, the bladder was opened through the perineum, the prostatic urethra and vesical neck were dilated with the uterine dilator, after which, in addition to several stones presenting, the finger readily discerned three large, globular projections of prostate into the organ. While the removal of the prostate at first would undoubtedly have given

better access for the removal of the stones, it was deemed necessary to be as conservative as possible, in view of the low vitality of the patient, and on that account the prostate was not attacked at that time. With scoops and forceps and fingers, about a dozen calculi were raked out of the bladder, one, two or three at a time, whereupon no more could be felt, either with the finger or the scoop. A stream of warm water was then run rapidly into the bladder, swelling it out, and as the water returned, bringing more of the calculi within reach, they were removed in a similar manner. This was continued until about twenty stones had been gotten out, when no more could be felt, even after several washings.

The washings and manipulations had consumed something like thirty or more minutes; it was not considered advisable to expend any further time in operative measures, even though it could not be determined positively that no more stones were left. A continuous stream of saline solution was kept running through the two-way drainage apparatus for the next twenty-four hours. There was no undue bleeding, no rise of temperature; and recuperation was as prompt as could be desired. A few small pieces of stone were washed out in the irrigations that were made daily in the next two weeks. Through the perineal opening a sound was inserted, but no stones were felt.

On August 20th, under cocaine anesthesia, the retrospective cystoscope was introduced through the same opening, and as pretty a picture was presented as one would wish to see, viz.: five little stones, lodged as if in



a nest, underneath the overhanging posterior lobe of the prostate, in a position in which they could hardly be felt with a metal instrument, even though sharply curved. (Fig. 2.)

On August 23d the patient was again put under chloroform anesthesia, the perineal wound enlarged, the interfering posterior lobe of the prostate shelled out, and the balance of the calculi scooped out.

Recovery from this operation was as prompt as from the other, and the

that of a pigeon's egg. (Fig. 1, No. 27.)

I have observed reports of a larger number of *small-sized* calculi being removed from the bladder, but I am not familiar with a case in which so many stones of considerable size were found in one bladder. Bangs and Hardaway say (page 417): "There are rarely more than five or six stones found, but cases have been reported in which three or four hundred small calculi have been met with." Keen,

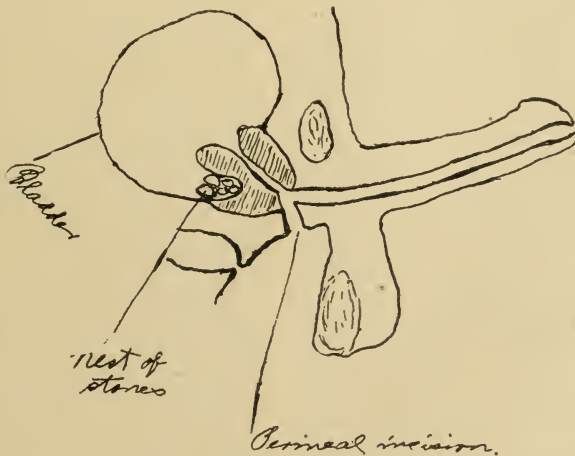


FIG. 2.—Five calculi in a nest under the projecting lobe of the prostate, shielded from the sound but visible with the author's retrograde cystoscope.

patient went to his home, in Illinois, on September 8th, and shortly afterwards entered on the discharge of his duties as traveling man.

Successive visits showed that he recovered his ability to urinate with satisfaction (almost a pleasure, as he put it), and to completely empty the bladder; and the various symptoms of irritation all disappeared.

The total number of stones removed from this case was twenty-eight; in size varying from that of a pea to

in 1893, removed four hundred and ninety-five very small calculi, the largest of which ranged from twenty-six to thirty-two of the French catheter scale.

Before leaving this subject I wish to quote from Mr. Bruce Clark, who says (*British Medical Journal*, May 13, 1899): "There are no differential diagnostic symptoms which separate this condition from ordinary cystitis. The difficulties in the way of diagnosis are enhanced by the fact that wash-

ing out of the bladder is quite sufficient, in many instances, to temporarily restore the urine to a healthy condition. In several cases the stones have been so thickly covered with mucous that they did not give an audible sound when struck with an exploring instrument. The fact that the presence of the stone was not known in half the cases operated upon and the difficulties that lie in the way of diagnosis, lead me to advise suprapubic cystotomy and exploration in all cases of cystitis that become chronic and rebellious to treatment."

If, now, we have learned by sad experience the necessity of adopting all of the accredited modes of research for stone in suspected cases—we have studied the history, have used the searcher and the cystoscope, and have failed to find evidence of stone in either the bladder or urethra, have we then fulfilled all the demands for comprehensive exploration that a chronic urinary case requires? What of the upper urinary tract? Or even of the lower? We have not excluded either of them. With respect to this question as it pertains to the lower tract, the following case teaches a forcible lesson; while it is not one strictly of calculus formation, it is so closely allied to it in its effects, if not in its nature, that it is related here:

*Case 8.*—Fr. L—d, grocer, aged forty-two years; was referred to me by the late Dr. T. F. Prewitt. The patient had pursued for sixteen years the endeavor to learn the cause of his urinary troubles, and had faithfully carried out many and various forms of treatment for their relief, but to no purpose. For all of this period of sixteen years he had suffered from

pain in the bladder, perineum and urethra, severe burning in connection with urination; frequency of the act; recurrent chills and fever, evidently septic; and the urine was always heavily loaded with pus, and occasionally with blood.

At the time of our first conference, in July, 1900, while I did not discover the exact origin of the trouble, I advised what would have led to its discovery had it been adopted, that is, perineal section for exploration and drainage of the long-inflamed bladder. The patient declined any operative plan, desiring to be cured by medicines only.

We saw nothing further of him for three years, during which time he experienced the same disturbance to urination, and pain and recurrent fevers and chills, and other indications of urinary sepsis.

In June, 1903, he came back again, under the advice of Dr. Prewitt, declaring that he was ready and willing to undergo any necessary form of treatment to get well of this harassing condition, which had troubled him for at least sixteen years.

The 22d of this month, after some preliminary treatment internally and locally with chloroform anesthesia, I incised the urethra through the perineum, running my finger into the prostate urethra, feeling the little sharp formations, which on being taken out with the forceps and curette, were found to be the three little bony spiculæ that I show herewith. (Fig. 1, No. 25. M.) They were located in the substance of the prostate, on the posterior aspect of the urethra. They were thought at the time to be calcareous formations, and it was only



afterwards, under careful examination that their true nature was learned.

When he awakened from his anesthetic condition, we learned that sixteen years previously he had met with some accident by which he received a severe contusion of the left hip. An abscess developed in the thigh, which was opened by Dr. Prewitt. There was a discharging sinus for a considerable length of time thereafter, and numerous pieces of bone emerged through the opening, which finally closed. A year after this some urinary symptoms made their appearance, and they continued until the time of the operation which we made in 1903. Evidently some of the spiculæ had wandered from the injured bone, and fifteen years previously had migrated into the prostate and set up the irritation of the prostate body and urethra, that had never discontinued until removed by our operation. Now, later, we learned that this did not embrace the whole of the trouble. While the various urinary symptoms disappeared on his recovery from the effects of the operation, the urine remained purulent, indicating that the infection had extended up into one or both kidneys, giving rise to suppuration there.

I wished to make investigation with reference to this point, but the patient felt so much improved that he did not wish to undergo further investigation, and we have never yet learned the extent of the involvement of the kidneys in the trouble; nevertheless, he has regained his general health to a very gratifying degree. He suffers no more from the frequency and urgency of urination, and pain and septic fevers, etc.

*Upper Urinary Tract.*—With reference to involvement of the upper urinary tract, it is necessary not only to determine the existence of a stone at some point, but it is equally as incumbent to locate it definitely—as to whether it is on the right or the left side; in the ureter or the pelvis of the kidney, of one side or the other. The number of stones and their size are also of importance as having a bearing on the measures determined on for their removal.

The methods for arriving at these results relate to a close study of the symptomatology and, more important still, physical examination of the patient, embracing analysis of the combined and the separated urines (from the respective kidneys), palpation, cystoscopy, ureter-catheterization and the use of x-ray photography.

While stones in the upper tract have certain symptoms and signs more or less characteristic and indicative of their presence, these should not always be expected; they are entirely lacking in some cases, and surprisingly eccentric in others. It is well established that a stone located in the kidney pelvis or the ureter may present its most urgent indications in the bladder or even in the opposite kidney; and it is also a sad fact that many a stone is born to blush unseen and undiscovered in the kidney until disclosed on the post-mortem table—an embarrassing testimonial to the fallibility of man and his scientific methods. I believe, however, that the lack of application of these methods will explain this occurrence much oftener than their failure to do good service when ap-



plied. I have in mind a case in which I hold myself seriously at fault in having failed to make investigation (ureter-catheterization) of the upper tract because I found what seemed to be enough trouble in the lower tract to account for the urinary symptoms presented.

*Case 9.*—A. L. G—r, aged fifty-five. First consultation June 20, 1904; referred by Dr. Amberland.

This case was a very complicated one, and obscure in a number of respects. There was much discussion among neurologists who had been consulted as to whether it was one of traumatic neurosis or of pure neurasthenia. The history of trouble dates from June, 1901.

While traveling through Kansas on a railroad train, there was an accident in which he received a severe jolting while lodged between the seats of the car, and a severe contusion of the left hip. Nevertheless, he went to work shortly afterwards.

In the fall of the same year he first began to have trouble with the bladder, and consulted his physician, who interpreted it as being some form of prostatic irritation. In 1902, he experienced a general nervous collapse, which continued during that year and 1903. There was inability to control his thoughts, to continue his work; there were pains in various parts of his body, in the right hip and the left side, and also severe pain in the bladder. He suffered so much about that time that hypodermics of morphia were used a number of times. He tried the use of the catheter for awhile, but obtained no relief. He consulted physicians and surgeons in New Or-

leans and Milwaukee, and neurologists in St. Louis.

Later he became unable to empty the bladder, and gradually developed from twenty or more ounces of residual urine. The urine became very foul and dense, filled with pus and highly colored. There was excruciating sensitiveness of both urethra and bladder, and the slightest manipulation was borne with great difficulty. No physical obstruction in the urethra was encountered except slight impediment to the catheter just at the neck of the bladder. The lens cystoscope could not be used with any satisfaction, because of the active bleeding within the bladder and the clouding of the fluid medium. The operative air-cystoscope was therefore used, when it was noticed that a diverticulum led from the posterior wall towards the fundus of the bladder, the opening of which was apparently the size of a quarter of a dollar, and the capacity of the sacculation sufficient to hold one or two ounces of fluid. The cystoscope could not be made to reach into the diverticulum, because of the dilated condition of the main cavity of the bladder.

Because of the patient's very bad condition generally, his extreme sensitiveness locally, and the bad condition of the bladder in connection with the sacculation of that organ, it was not considered advisable or necessary to catheterize the ureters, and no further cystoscopic examination was attempted. The conditions already mentioned were considered sufficient to account for the urinary symptoms, so that it was considered inadvisable to pass the catheters into the ureters.

The patient was treated with bladder washes and dilatations of the neck of the bladder, notwithstanding which he made no improvement. Conferences were had with other physicians who were unable to shed any light on the case. No complaint directly referable to the kidneys was made at any time. There was gradually increasing debility, recurrent fever, occasional chills, loss of weight and appetite.

Post mortem examination showed sacculation of the bladder as above detailed; chronic cystitis, but in addition thereto, something that had not been discovered before, namely, a stone in the substance of the left kidney, with consequent pyelonephritis and dilatation of the right ureter and kidney pelvis, probably resultant from the backward pressure from the contracted condition of the neck of the bladder.

The error in this case was on the side of conservatism. We should have examined more than we did; we should have introduced the catheters up the ureters, when we would have obtained purulent urine from both sides, indicating that trouble was located higher up than just the lower urinary tract. We could not have touched the stone in this case with the catheter, but a sufficient clue to its presence would have been given for the use of the x-ray, by which it should have been disclosed.

A more fortunate case than the preceding one is the following one of stone in the kidney:

*Case 10.*—C. B. H—n; claim agent; American; married; aged thirty-four years.

The diagnosis of the case is chronic

prostatovesiculitis, and right calculous pyelitis.

This patient consulted a number of physicians and underwent a number of different kinds of treatment before being referred to me, March 31, 1904, by my friend Dr. Lindenberger, of French Lick Springs. His symptoms began about one year previously, shown by irritation and frequency of urination, and bearing down pain in the region of the perineum and neck of the bladder. The symptoms were much more pronounced in the day time than at night.

He made a trip to French Lick Springs shortly after the beginning of the trouble, which seemed to give him complete relief, but his symptoms began again three months ago. Since that time he has noticed much sediment in the urine, and often it has appeared to contain blood. A physical examination disclosed some swelling and acute tenderness of the prostate and seminal vesicles, which therefore first received our attention.

Treatment by means of prostatic massage, the hot-water siphon and internal antiseptics, diminished the inflammation that existed in the prostate and seminal vesicles.

Nevertheless there was considerable clouding and always blood corpuscles in the urine, the persistence of which led us to advise ureter catheterism in order to get the testimony of the urine coming direct from the kidneys. Double ureter catheterism was carried out on April 25, 1904. The urine from the left kidney was clear and free from abnormal elements, excepting a few red blood cells. These evidently came from the contact of the catheter. The urine from the



right kidney showed a large amount of pus as well as blood corpuscles.

From the history of the case, it was suspected that the inflammation in the right kidney thus shown, was due to a possible calculus. Therefore, Dr. Brokaw was requested to take an x-ray photograph of the two kidneys. The result was a shadow shown in the right kidney, indicating calcareous formation in that organ. On June 22d, under chloroform anesthesia, administered by Dr. Crandall at the Baptist Sanitarium, the right kidney was opened through the lumbar region by an oblique incision. After some difficulty, adhesions surrounding the kidney were severed and the organ brought into view. It was incised on the convex surface. A finger pushed down into the pelvis at once detected an angular stone of irregular outline, about as large as a hazel nut. This was removed and cleaned. A facet on one side indicated the existence of an additional stone which was also removed, and which was considerably smaller than the original one. (Fig. 1, Nos. 33 and 35.) A rubber drainage tube was left in the kidney pelvis. The external wound was partly closed by silk-worm gut sutures. The patient convalesced satisfactorily, and recovered from the effects of the operation without undue delay or difficulty. Later, it was found that there was some tendency to persistence of the inflammation in the right pelvis, but this was gradually overcome by repeated ureter catheterizations, and washing of the kidney pelvis with argyrol solution.

The patient has recovered his general health; he has gained 40 pounds

in weight, and carries on his work with renewed energy and satisfaction.

Cases in which kidney stone is diagnosed and sought for by exploratory operation, yet not found on opening the kidney, are numerous, indeed. Jacobson, of Guy's Hospital, reported 25 such cases—in which the symptoms of renal stone were present, lumbar nephrotomy was done and no stone found, the urinary symptoms having then been attributed to uric acid crises and other affections. Henry Morris reports 28 similar cases, in eleven of which nothing was found to account for the symptoms that had been interpreted as indicative of calculus.

It must be observed, however, that these cases were reported before the present era of ureter-catheterization and x-ray work. I believe that with these measures at hand, no surgeon will again report such a large series of such cases.

Without going into an analysis of all the signs of stone in the upper urinary tract, it may be mentioned that there are certain ones on which reliance may be placed; these are pain, hematuria, and the evidence afforded by use of the ureter-catheter and the x-ray.

*Hematuria.*—Hematuria, either in macroscopical or microscopical quantities, is practically always present where stone is present at some point in the urinary tract. I do not remember to have ever seen an exception to this rule. I have seen cases in which the urine looked, to the naked eye, quite clear, and without closer investigation it might readily have been presumed that it contained no blood; but sedimentation and microscopical



search have always demonstrated red blood cells in definite numbers. While the finding of hematuria does not necessarily lead to the diagnosis of stone, it serves a very useful purpose as confirmatory evidence, indicating, for instance, that the trouble has to do with the urinary tract rather than the liver or appendix; the appropriate examination then being carried out, the differential diagnosis should be determined.

*Pyuria.*—I have been on the lookout for a number of years to learn whether it were possible for a stone to exist in the kidney or ureter without the production of pus in the urine; in other words, whether pyuria is not equally as constant a factor as hematuria. I have also seen cases of urinary stone in which the urine was described as "perfectly clear," but in addition to blood corpuscles, many pus corpuscles were contained therein. While I can conceive it possible for stone to exist at some point, the channel becoming blocked or plugged below that point and by preventing drainage, preventing the passage into the lower tract of the pus or blood corpuscles; still I believe this is more or less a theoretical proposition, occurring practically never. A stone in a ureter does not permanently and completely block the passage of urine past it; while the stone itself may not be able to pass down, the ureter dilates sufficiently in addition to allow the urine to get through. I show here a section of ureter containing such a stone, from a case of multiple lithiasis, in whom I observed during his life, with the aid of the cystoscope, the urine to issue in the normal interrupted jets from each ureter opening.

I have therefore concluded, in my own mind, that both pus and blood are practically constant factors in this condition; although various symptoms of calculus might be present in a given case, I should hesitate to diagnose calculus without them.

*Pain.*—While the third of the triumvirate of characteristic indications of stone in the upper urinary tract may not be as faithful in its attendance on such cases, it usually makes up for such shortcomings by the vigor and aggressiveness of its attacks when it is present. Stone lodged in the kidney tissue does not cause as severe pain as when it is lodged in the pelvis or ureter, where it has room to roll around, subject to the movements of the body.

Interrupted renal or ureteral *colic* usually indicates that the stone has entered the ureter, or is engaged in its entrance, trying to pass down that narrow channel to the outer world. Whether it is very minute or of more considerable dimensions, does not determine the amount of pain experienced; the muscular ureter contracts down on it spasmodically, irritating the nerve ends and also causing backward pressure of urine behind it, to a certain degree. If the stone is small enough to get by the narrow isthmuses of the ureter, or the ureter relaxes sufficiently to allow the crowding urine to push it along, possibly it may pass into the bladder—and the victim is fortunate. It is, however, well established that certain kidneys have been entirely destroyed from the prolonged retention of such small calculi, and in some instances without causing enough pain to attract attention to the kidney as the source of

trouble. Dr. Caldwell, in *Railway Surgeon* for July 14, 1896, relates the very interesting history of his own case in which, although he evidently carried the stone in one kidney for upwards of sixty years, the pain occasioned was very erratic and served to delude the many diagnosticians of both this and the old country who were consulted during this long period. In this case the pain was located in the sacro iliac region; and exercise or horseback riding did not seem to increase its severity, contrary to the usual rule. The calculus was finally removed, in 1895, by Dr. Murphy, of Chicago.

This case and these facts about these several symptoms and signs serve to point the moral that I think is most useful and impressive in the study of these conditions—namely, that it is not the symptoms and general history on which we may expect to place reliance for diagnosis, but the *physical examination*. If, instead of analyzing symptoms for sixty years, in Dr. Caldwell's case, while he was suffering the torments that he so forcibly describes, the ureters had been catheterized and the x-ray applied, it is probable that the operation that finally gave him relief would have been advanced a number of years.

The proper and most direct mode of investigating a case suspected of having stone in the upper urinary tract, it appears to me, is (a) to study the history given; (b) learn anything from palpation that may be discovered; (c) analyze the mixed urine taken from the bladder; (d) introduce the cystoscope and observe the interior of the bladder (especially the appearance of the two ureter open-

ings); (e) catheterize the two ureters, with the double object of noting an obstruction at any point in the channels, and of draining and analyzing the two urines as they come direct from each kidney; (f) if pus or a considerable quantity of blood show in either urine, have an x-ray taken, embracing both kidneys, ureters and the bladder. It must be remembered that a catheter passed up the ureter to the kidney, causes the appearance, usually, of more or less blood cells in the urine of that side merely from its mechanical impact; but it is usually not difficult to estimate the bearing this has on the individual case—by comparing the quantity of blood seen before manipulation with that incident to it. On this account, as well as for other reasons, it is always highly desirable to investigate the urine for blood and pus before any instrumentation has been carried out.

If a calculus be impacted at some point in a ureter, the catheter will meet with obstruction at that point, and if, in addition, we find purulent and bloody urine coming from that side (and not from the other), the presumptive evidence of ureter stone is very strong. If the case be a female, and we are using the wide-open air cystoscope, we may employ the wax-tipped ureter-catheter, as advised by Dr. Kelly, and look for the scratch marks on the wax that are supposed to register the contact with the calculus. But, unfortunately, I believe the usefulness of this procedure is confined to the female sex and the short, open cystoscope, for when we try to pass the waxed catheter through the long channel of a male cystoscope, of whatever design, its



liability to be scratched or rubbed is so great as to make the test unreliable, to say the least.

*The Segregator.*—If properly and successfully used, the segregator is capable of draining the two urines independently from the two kidneys, and show pus or blood in one or other of the two urines; but it is not capable of giving the contact or obstructive indications of the stone that the ureter-catheter is. It is quite as liable to develop blood corpuscles in the urine from its mechanical contact, and I confess I have never been able to satisfy myself that complete segregation was attained, with no possibility of mixing the two sides. But when you have a ureter-catheter passed to the kidney pelvis of one side, and another to the pelvis of the other side, you *know* there is no chance of contamination between the two, even should the patient cough or strain to urinate, etc. As to a comparison between the painfulness of the two procedures, the choice is much in favor of the catheterization. As soon as the catheters are inserted the cystoscope is withdrawn, leaving the catheters to drain for a half hour or so, while in order to drain an equal quantity of urine with the segregator the whole metal instrument must be left in during that time, causing much complaint on the part of the patient.

I have asked my friend, Dr. R. D. Carman, who has had large experience in such work, to give me his estimate as to the present status of the Roentgen-ray examination for diagnosis; he deems the advantages of the method to be as follows:

1. The examination is painless, no general or local anesthesia being

necessary, with resultant depression, etc. 2. No danger from traumatism or infection; the danger from burn is practically nil. 3. It gives the exact location of the stone, and, especially important, the number of stones present. 4. There is no exploratory operation necessary for diagnosis. 5. The negative diagnosis is as accurate as the positive, except in very stout patients. 6. It differentiates calculous nephritis from other conditions in neighboring organs.

The percentage of error in all cases skiagraphed, of the great number of operators, has been less than 3 per cent.; and in the majority of instances where there were erroneous negative diagnoses, the calculi were so small that they passed without surgical interference.

#### DISCUSSION.

Dr. E. G. Mark, of Kansas City: Dr. Lewis' paper covers such a large field, and covers it so thoroughly, that it is difficult to add anything of interest to what has already been said. In the use of the cystoscope, I agree with him most thoroughly. It has been my rule in all bladder cases, where there is the slightest obscurity in diagnosis, to cystoscope; and it is a rule to which I believe there can be no exceptions. Certainly, in bladder stone, cystoscopy is an essential for these reasons:

(1) To decide the presence of stone; a question which may be decided positively by other means, but which can never be decided negatively otherwise.

(2) To ascertain the number of stones present.

(3) To learn the character, size and location of such stones, and



whether they are encysted or free in the bladder cavity.

(4) To ascertain the existence of concomitant conditions, such as tumor, diverticula, obstructive hypertrophy of the prostate and contracture of the bladder neck.

I consider all the foregoing essential to an intelligent diagnosis of bladder stone.

The necessity for such diagnosis is well illustrated by a case reported by Guiteras, at the last meeting of the American Urological Association, in which he attempted a Bottini operation without previous cystoscopy, and failed by reason of an encysted calculus back of the prostate.

The cystoscopic examination should determine the line of treatment to be followed, and Dr. Lewis has covered this field too well to call for further discussion.

In pelvic stone I consider constant microscopic hematuria, the significance of which is so insisted upon by Ransohoff, to be of great diagnostic value, especially when considered in conjunction with Bierhoff's test. The telephonic principle, lately applied to ureter-catheterism for the purpose of detecting kidney and ureteral stones, would seem, in my judgment, to be a most excellent procedure, and one upon which much reliance may be placed.

The shortcomings of the x-ray and the wax-tipped catheter of Kelly, have been well pointed out by Dr. Lewis, and require no further mention.

Dr. Lewis' operative cystoscope must command the admiration of all of us, and certainly opens up a wide field for speculation. In the same connection, the dilatation of the ure-

ter with sterile oil, to facilitate the passage of a ureteral calculus, suggested and applied successfully by Dr. Louis Schmidt, of Chicago, is of interest.

As has been pointed out, neglected kidney stone is capable of the greatest damage, and, the diagnosis once made, no time should be lost in temporizing. Attempts to dissolve the stone are worse than useless, and operative procedures should be immediately undertaken.

There is one class of urinary stone upon which the essayist did not have the time to touch, and it is one upon which I should like to have heard him express himself—*i. e.*, prostatic stone. Lately I exhibited, before the Kansas City Academy of Medicine, one hundred twenty one stones, which I had removed from the prostate of one case. The diagnosis of these cases is by no means hard in the hands of a careful diagnostician. The difficulty lies in the misleading symptoms, and in no inconsiderable proportion of these cases the diagnosis depends upon a careful posterior urethroscopy.

Dr. H. J. Scherek of St. Louis: I cannot let this opportunity pass without adding a word of appreciation for the work accomplished along the lines indicated by the reader of this paper.

It has been my good fortune to have seen the practical accomplishment of this refinement in the diagnosis of bladder troubles. In the conduct of a large genito-urinary clinic I have recently seen several cases in which the exact conditions could not have been diagnosed except by two means: First, an exploratory operation or the proper use of the cystoscope. In

these cases a stone was situated posterior and underneath the prostate. An operation was done, of drainage of the bladder and the stones were accidentally discovered.

There is, however, no gainsaying that in the hands of the average man the cystoscope is not as serviceable as it is with Dr. Lewis or those equally expert.

With regard to ureteral catheterization, I would urge a few words of caution. In the first place, it unquestionably requires an expert to get the full benefit of this procedure; secondly, I have no doubt that it is often attempted and done in cases where the proper indications are wanting; in the third place infection can take place as a result of this method. In cases of gonorrhœa an infected catheter is often introduced into an aseptic ureter, because we know that we frequently have cases of violent cystitis with positively no urethritis. The newer method mentioned here to-day, which consists of the telephone arrangement in order to hear the metallic click, appeals to me as a decided advance, and as a result of which more precision may be expected. I think it has a decided advantage over the wax catheter.

In conclusion, I wish to express my deep interest in all that Dr. Lewis has said, for I realize that the stimulus of his initiative has done much toward the advancement of this line of work.

Dr. Lewis, in closing: I did not go into details of symptoms and tried

to give just the most valuable requirements to make a diagnosis. A barrel of symptoms are not worth ten cents compared with fifteen minutes of personal examination by the doctor. In that examination what is it that will lead to a correct diagnosis; is it the stone searcher? No, sir. Suppose you have a stone in the bladder; which is worse, to leave that stone there for ten years or to put the cystoscope in and then get it out? Manifestly the thing to do is to make a diagnosis of the stone and then get it out. If there is a stricture of course you want to remove it, but just because you have a stricture is no reason why you should not make your diagnosis of stone if there is one present. I do not agree that strictures are in the majority of these cases. In all these I have reported, there was no single instance of stricture, but if you have a stricture and fail to remove it, you will fail to get a good result. As to the suprapubic route versus the perineal route, in certain cases you could not cure a man in ten years by doing simply a suprapubic removal of stone in the bladder, for in many of these cases where stone is present, there is a contraction at the neck of the bladder. If you leave that contraction you will get a suprapubic fistula for an indefinite length of time. In one such case I had to go into the bladder and correct it because at first I had not recognized it.



## HYPERTROPHY OF THE HEART WITHOUT DISEASE OF THE VALVES.\*

By J. R. LEMEN, M. D., St. Louis.

When gathering prominent facts in regard to disease of the circulatory system it is astonishing how irrelevant the symptoms are to the actual disease present in many cases. When a patient suffers from palpitation it is at least inconvenient, and will probably scare him, but this does not mean that he has disease of the heart.

If we can detect a murmur during the heart's cycle this shows that the machinery is not running clear, as an engineer would express it, but it does not mean that the heart should be treated, for the compensatory hypertrophy may be perfect, and this is nature's way of dealing with imperfect valves, therefore the effort of the physician should be in the direction of sustaining the growth but not of increasing it by the use of drugs beyond the necessary requirement in the individual case.

However, in many patients that present themselves to the physician the symptoms are such that they do not even suspect that the heart is at fault, and will locate their troubles in other organs, when indeed they have the most pronounced weakening of the myocardium.

Upon examination of the heart in these patients, we do not find a murmur during the heart cycle, but we possibly find irregularity in the beat, or they may have tremor cordis or delirium cordis. The patient will com-

plain of dizziness upon moving rapidly, he will have shortness of breath upon exertion; and in outlining the heart, by percussion, we find the actual dullness of the heart area considerably increased, showing hypertrophy.

When we find these signs and symptoms, it is not due to the intrinsically diseased heart, but because of the fact that the heart is not able to overcome the ever increasing blood pressure in the systemic or pulmonary circulation.

The probability is that the heart has been gradually growing in muscular power for years in its attempt to take care of an increased blood tension that has not been noticed by physician or patient.

We know that a large part of the heart power is used to dilate the vessels, and if there is for any reason a continuous contraction of the vessels in the general circulation, the heart follows the well known law whereby all hollow muscles hypertrophy and increase in strength in proportion to any obstacle offered to the exercise of their function, provided their metabolism remains perfect.

In this we have the key to the condition, for so long as the metabolism is perfect the heart will continue to grow, so as to care for the increased weight in the blood vessels; but when the pressure is high continuously—say that the Riva Rocci sphygmomanometer indicates a pressure inside the arteries of 180 m.m.—it is

\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.



very plain that the metabolism of the heart will eventually be interfered with, as well as the nutrition of other parts of the body; and as a consequence, we have the myocardium unable to take care of circulation properly, and we have resulting dilatation and possibly sudden death from heart failure.

The direct cause of the hypertrophy in these cases is the extra work of the heart to overcome increased pressure, and it is astonishing how frequently the Riva Rocci will show very greatly increased pressure in people that are apparently otherwise in good physical condition.

We must remember that the vessels are not only elastic, but are also endowed with "nervous governance." We must also consider that nature, when in harmony, is very economical; that one function is expected to rest while some other is working. Thus the man who is digesting a heavy meal is not expected to give us his best thoughts during that time, since the elastic vessels, by contracting and dilating, will supply increase blood to one part and diminish it in another. When the equilibrium is maintained we do not find the general blood pressure greatly increased in health by the activity of the various functions; but disturb the equilibrium by great functional activity in the stomach and muscles at the same time, and the blood pressure will be tremendously increased with consequent extra strain on the vessels, the heart getting its full quota. We have seen in just such conditions the Riva Rocci record a pressure of 200 m.m. to the square inch; if the metabolism of the myocardium is

good the heart will lift this load without permanent injury; but if the coronary arteries are not supplying proper nutrition, we are likely to have trouble and probably disaster.

Thus we see that the direct cause of hypertrophy of the heart, when it occurs without disease of the valves, is due to the increase in the blood pressure in the circulatory system.

We believe that this is the cause of many indefinite and puzzling symptoms that cannot be explained on any other hypothesis; but when we attempt to find the *cause* of this increase in the blood pressure we have to admit that with our present knowledge of vito-chemistry it is sometimes unexplainable; however, in other cases we are more fortunate, and can find the cause and correct the evil.

The "nervous governance" is affected through the vasomotor system when the equilibrium is not maintained and the vaso contractors increase the tension, which is not relieved by the corresponding promptness of the dilators to do their work, and, as a result, we have this arterial tension constantly present and the heart growing to overcome the pressure in these contracted arteries.

We have now a patient suffering in this way. A gentleman, fifty-two years of age, married, good personal habits, an intense worker, closely confined, with a great deal of literary work, a man that seldom allows himself to relax. His blood pressure, when we first examined him, was 220 m.m. He could not sleep, complained of great restlessness, nervousness, and was generally out of condition. When the pressure was reduced to something near normal, say 160

m. m., all of these symptoms disappeared, and he could sleep like a baby, as he said. This was done by the use of nitroglycerine, sodium iodide, and moderate exercise in the open air.

Again, we see the same condition of increased blood pressure from indiscreet indulgences at the table or in the use of alcohol.

We have under treatment another gentleman fifty years of age, married, a farmer, in comfortable circumstances, robust appearing, weighing 230 pounds, a big eater and a moderate drinker of beer. He complains of distress in the region of the heart; the heart is quite irregular, and at times seems to labor greatly, so that it causes him to feel exceedingly uncomfortable; he finds himself unable to maintain marital relations, and is exceedingly depressed because of his condition.

The pressure shown on first examination was 215 m. m.; the heart was considerably hypertrophied, the apex beat being on the mammary line, one-half inch lower than normal.

The cause of the high pressure was believed to be the disturbance of digestion resulting in lithemia and uric acid. He was given hydrochloric acid and potassium iodide, and under this treatment the pressure was reduced to 205 m. m. in one week. In another week, under the same treatment, the record was 185 m. m., with decided improvement in all symptoms.

He is still under treatment, with indications that there will be still greater benefit.

In a number of other cases we have been very much gratified with the improved condition of patients when

the blood pressure was reduced to something near normal.

Of course in the class of cases where hardening of the arteries has taken place and the elasticity is gone, the problem is much more serious, and these cases are frequently benefited but little by any treatment.

To sum up: First, be careful to investigate the blood pressure in all patients that have passed forty years of age. Second, we believe that many cases of neurasthenia and allied troubles can be relieved by correcting and reducing the high blood pressure, thus relieving the strain on the heart. Third, we would recommend the words of Prof. T. Clifford Allbutt, "that you advise your patients to have their blood pressure tested every two or three years, so that any disposition to excessive pressure may be averted and the integrity of the arterial tree preserved."

#### DISCUSSION.

Dr. T. F. Lockwood, Butler:—The heart and its ailments is a subject that should be more thoroughly discussed than it is to-day. It is the first organ to reach maturity, it is the first to be installed in office and it is the last to cease its action. Animation may vanish and the soul itself take its flight before the heart will yield to the inevitable. It is an organ that has been neglected from the fact that we have laid aside its study for something less intricate by which we may establish a reputation. The progress in surgery has brought about such conditions that we realize we must stain our hands with blood before we can become famous, and surgery has directed us away from the com-



mon field of medicine. Hypertrophy of the heart is not a pathologic condition; I believe it to be a physiologic one, a condition that nature has brought about to overcome some obstacle; there has been perhaps some congenital defect, there may be an arteriosclerosis. These are the most common causes of cardiac hypertrophy, the greater work placed upon the heart having caused an increase in the muscular structure, just as we find a development in the muscles of the blacksmith's arm from constant use, just as we find a physiological enlargement in the heart's structure. There is no specific cure for hypertrophy, and a favor of its continuance is to be sought rather than retarded in order to maintain proper compensation.

Dr. I. J. Wolf, Kansas City:—I have but one criticism to offer, *i. e.*, the paper should have been entitled "The bad results of increased blood pressure upon the heart and upon the system." There was a time when no one thought of disease of the heart-muscle, but the time has come when we pay more attention to the muscle than to the valves. The heart, of course, is divided into two sides, the left side becomes hypertrophied from arteriosclerosis, contracted kidney and from increased imbibition of fluids, as beer, etc. When I was a student at Munich, where some people drink as many as thirty quarts of beer a day, there was

a heart hypertrophy known to pathologists in that city caused by the immense drinking of beer to which they gave the name "Munich disease." Hypertrophy of the right heart, on the other hand, may be due to bronchitis, asthma, etc., but hypertrophy of either side is always caused by some obstruction in the periphery. Whenever the heart is called upon for any length of time to do more work than ordinarily, it becomes hypertrophied, and this is a benign hypertrophy; but when the contractions of the heart are no longer strong enough to overcome the obstruction then, in addition to the hypertrophy, we get dilatation as well, and it is then that we get symptoms of lack of compensation. The same is true in disease of the stomach. We have now learned that the motor function of the stomach is the important one and as soon as the motor function is disturbed the patient suffers. So it is with the heart. Even in severe valvular trouble the patient will feel comparatively well until there is lack of compensation.

Dr. J. W. Dean, Maryville:—I want to make a little criticism of the treatment. My understanding and knowledge of nitroglycerine is that it increases the pressure instead of diminishing it. The question in my mind is how the essayist would diminish the pressure by giving nitroglycerine.



## SPECIMENS OF PELVIC SURGERY WITH CRITICAL REMARKS.\*

By A. H. MEISENBACH, M. D., of St. Louis.

## I.—CARCINOMA OF CERVIX UTERI.

This is not a rarity, but it illustrates the diagnosis, prognosis and operative technique. The patient was thirty-five years of age and had four children. I first saw her on the first of April. She had been seen previously by a physician who had diagnosed carcinoma of the cervix, and advised operation. She had gone to him for persistent hemorrhage. I corroborated what the physician had said. I found the cervix involved with the mouth gaping. The uterus was freely movable. The woman was of spare build and the diagnosis by bi-manual examination could be easily made. I chose the abdominal route and found it a comparatively easy operation, but I also found that the pelvic glands were much involved on the right side. They were involved to such an extent that I hardly felt justified in attacking them and attempting to get them all out. The vaginal route does not give a man a fair chance in such cases. I doubt if the involvement of the pelvic glands can be determined and outlined so that the prognosis can be fairly determined. I have once or twice used the vaginal route for removal of the uterus, but it has never been satisfactory. The vaginal route has been developed by the Belgian and French schools, and for a time it seemed to be *the* operation, but I suppose men came to look at it as I have, namely, that it was, on the

whole, unsatisfactory. The abdominal route has an element of added danger, but at the same time there is some satisfaction in knowing you have the field clearly before you. Practically you are working in an open field and not in the dark, as in the vaginal route. I invariably use that abdominal route and have never had to regret it. Of course we can't deny the element of danger due to shock, etc., yet when we have vaginal drainage this is minimized and in such cases drainage is one of the prime factors so far as the handling of the case is concerned. Even in removing fibroids of small size the abdominal route is superior. I once removed a tumor the size of an orange through the vaginal route and had the misfortune to lacerate the rectum and infection occurred which might not have resulted had I chosen the other route. Under some circumstances it may be very difficult, so that in all important operations I have discarded the vaginal route. The only exception I would make would be in inflammatory conditions where I am dealing with pelvic abscess or pus tubes, where a temporizing operation has to be done, but also in these cases radical operation can only be done satisfactorily by the abdominal route.

## II.—FIBROIDS OF CERVIX AND CORPUS UTERI; CYSTIC OVARIES; UTERUS GRAVIDARUM.

This patient was forty-two years of age and had been a bachelor girl up to November of last year. She was a

\*Presented at the meeting of the St. Louis Medical Society, June 10, 1905.

woman of fine physique, raised in the country. She had never given any history of decided ailment until about March, when she began to flow irregularly and excessively and within the last month began to have pain, especially in the left side. Her family doctor made a diagnosis of fibroid and sent her to me. On bi-manual examination the os had the feel of the infantile type. It presented no evidence of pregnancy. The protruding portion could be noticed, and with one hand on the abdomen it gave the impression that this was one mass. It was movable and not bound down. I made a diagnosis of multiple fibroid, but the diagnosis of pregnancy was not made, nor could it be made at this stage. I saw her first in May, and on June the first performed pan-hysterectomy. The right ovary was about the size of a fist. The uterus was fairly movable. In trying to free the right ovary it broke down and from it escaped a grumous mass, looking like a chocolate mixture. In this I found dark crystals of hematin. There had been a hemorrhage into the ovary. On the left side I found a similar condition in a minor degree, so I removed both ovaries. I felt I would prefer to induce the menopause than to take any chances of a recurrence of disease in the ovary that could be laid at the door of the surgeon later. At the base of this mass were adhesions and inflammatory conditions, though the woman gave no history of any febrile reaction, but there was quite a peritoneal involvement. The bladder, too, was much more closely bound down than we usually find it, and for the first forty-eight hours the patient passed

bloody urine. The salient feature in these operations always is to guard against injury to the ureter, and, next, the bowel. Fortunately the ureters were not involved. You will find here a beautiful example of the pregnant condition of six weeks' or two months' gestation. Aside from the passage of bloody urine the patient is in good condition.

### III.—CARCINOMA OF THE RECTUM.

The patient was sixty-five years old. I first saw him on the 6th of May, 1904. The previous fall he had been examined by a good surgeon of St. Louis on account of his rectal trouble. A small piece was excised and examined by one of our best microscopists in St. Louis, and a negative result reported. The gentleman "lay on his oars" and was only tentatively treated. On the 6th of May, when I saw him, the mass could be clearly outlined about one and a half inches from the external skin margin and passing in the direction of the prostatic part of the bladder. When the question of operation was placed before him and he was told that it was a case that would mean much suffering, or, if operation were chosen possibly death shortly thereafter, he chose the latter. On the 19th of May I did an operation for excision of the rectum. I made an incision around the anal margin and then simply drew the rectum down, twisting the coccyx out of place but did not resect it. I think this exemplified the fact that the Kraske operation is often an unnecessary operation in carcinoma of the rectum. I found no difficulty in bringing the rectum well down and resected about five inches of it. I



also resected both lobes of the prostate. This left a large wound which was slow in healing. The patient was in the hospital about three months. In the third week of November he went to the World's Fair in an open buggy. He was still weak from the operation, and the weather at that time being quite chilly he was seized with an attack of grip resulting in pneumonia, followed by a lethal ending in December. At the post-mortem I found that there had been no recurrence at the site of operation, but in the liver there were a few nodules, and on the surface you will see quite a little nodule which is carcinomatous, but the liver tissue is not involved at all macroscopically. The fact that a recurrence took place at this time would not have been responsible for his death, for he could have lived on a long time. It also shows a beautiful case of solitary gall-stone in the gall bladder. He always had an idea that he had cirrhosis of the liver, which was not the case; the liver irritation was due to the solitary stone, which floated about and may have produced symptoms of irritation. This case illustrates that in carcinoma of the rectum, when these cases are taken early the chances of protracting life are very favorable, provided a radical operation can be performed. The Kraske operation is a very severe one. I have only done it once. That patient was a woman with a carcinoma of the sigmoid. Occlusion had taken place and the bowels were like a drum. I did a colostomy and the result that followed was remarkable. From a pale, cadaverous woman she became fat and plump. Finally I did a Kraske operation to which she

succumbed, and I have often thought that had I let her alone she might have gone on fairly comfortable for quite a while. This rectum was shriveled considerably. I made a clear incision, removing all the contents of the lower pelvic floor along with the muscular floor and the fat. I did not make an incision through the gluteus muscle and form an artificial sphincter, as has been suggested. This specimen removed at the post mortem shows no involvement. Though I did not take this out myself, it was taken out sufficiently well to show that there is no return; for carcinoma and sarcoma are conditions that most always show macroscopically.

#### DISCUSSION.

Dr. George Gellhorn said that in this connection it might be of interest to give a history of the operation for cancer of the uterus. The first vaginal hysterectomy for uterine cancer was done by Langenbeck in 1813, and afterwards by Sauter in 1822 and Recamier in 1829. Then there was a long interim when no hysterectomies were performed. After the introduction of antiseptic vaginal extirpation for uterine cancer was taken up by Czerny in 1879. The first abdominal hysterectomy was performed in 1878 by W. A. Freund, of Breslau, Germany. This patient is still living and was demonstrated before the Society of German Physicians and Scientists in 1904. But the following operations by Freund and those who adopted the method were accompanied by such an appalling mortality that the operation was abandoned for many years. In 1895 Ries, of Strassburg, now of Chicago, suggested to include in the ab-



dominal operation the widest possible extirpation of the parametria and the larger portion of the vagina and to clear out of the pelvic cavity all of the pelvic glands, whether enlarged or not. The following year Clark, of Johns Hopkins, devised a similar operation. In 1900 Wertheim, of Vienna, revived the operation of Ries and created a new movement in the operation for uterine cancer. A large number of modifications and extensions of the Wertheim method were all based on the original suggestion of Ries. The salient point of these abdominal radical operations was the complete extirpation of the parametria, the pelvic glands and the pelvic connective tissue. This procedure was based on the assumption that in uterine cancer the lymph glands of the pelvic cavity soon become infected; and unless these glands were removed, all efforts to prevent recurrences would be futile. But there are strong objections to such a radical procedure. First, the statement that the lymph glands are nearly always involved and in an early stage of the uterine affection were disputed. The speaker had had the opportunity of compiling the literature on the subject for a paper read before the American Gynecological Society, and he had found, from the literature at his disposal, that the frequency of glandular involvement in uterine cancer had been greatly overestimated. It seemed that, irrespective of the seat of the cancer in the uterus, the pelvic glands were involved in 27.7 per cent. of the cases, and even in the most dangerous form, viz., cancer of the cervix uteri, it did not exceed 28 per cent. plus. In other words, in only

about one-third of the cases of cancer of the uterus were the pelvic lymph glands involved. In the remaining two-thirds the lymph glands were normal. It followed that if the suggestions of Ries were carried out, and the lymph glands extirpated in all cases of cancer, that two-thirds of the cases would be thus subjected to an unnecessary operation. Unfortunately one cannot tell before or during operation whether or not a gland is involved; in other words, should be removed. A mere enlargement was not indicative of involvement. It might be due to a hyperplastic or hypertrophic condition. The studies of Schauta, of Vienna, were conclusive in this direction. On the other hand, in quite small glands cancer had been found on microscopic examination. It required sometimes hundreds of sections before the cancer could be demonstrated. It was evident, then, that it would be necessary to extirpate all glands irrespective of size and appearance, and as the lymph glands were diseased in only one-third of the cases, in the other two-thirds excision would be unnecessary. Of course cancer is such a terrible disease that we would be justified in rather doing a little too much provided it could be proved that removal of the glands did not materially increase the danger to the patient. The mortality from the radical abdominal operation with the extirpation of glands was 21.5 per cent., compared with a 7 to 9 per cent. from the ordinary simple vaginal extirpation, or compared with 9, 10 or 11 per cent. from the simple abdominal operation without the removal of pelvic glands or pelvic tis-

sue. The morbidity was also very considerable. Out of thirty-three cases of von Rosthorn but fourteen had an undisturbed convalescence. The possible injuries to the ureters, the bladder, the rectum and intestines, the increased danger from infection due to the prolonged operation and the unavoidable handling of the intestines during the operation, and the possibility of ileus, especially in operations of long duration and in weakened individuals, all speak strongly against this radical procedure. Moreover, even with the extensive operation as advised by Mackenrodt, Sampson, Strauch and others, it had been proved to be absolutely impossible to extirpate all the pelvic lymph glands. This was based on anatomical grounds. First, they were not always in the same places. There were glands where one did not expect to look for them, and, in addition, there were technical difficulties that prohibited the removal of these glands—*e. g.*, there was one gland beneath the hypogastric artery which could not be removed in the living on account of its location; then there were those glands above the bifurcation of the aorta, the lower, median and upper lumbar glands, and those hidden beneath the mesentery, and these upper glands were affected in a great percentage of the cases in which the lower glands were unaffected, so that the removal of the lower glands would still leave the operation incomplete. Wertheim, in 1904, reported to the Gynecological Society of Vienna that all of his cases in which carcinomatous glands had been removed had become recurrent. Clark, another authority, admitted two years ago that

he had ceased to think that the removal of affected glands formed an intrinsic part of the operation. Sampson, who himself had devised a very radical method, in the May number of the *Albany Medical Annals* said that he now realized that the ultimate results of cancer operation with the removal of the lymphatics gave no better results than those without the removal of the glands. Briefly, then, Dr. Gellhorn believed that the removal of the lymph glands in operations for cancer of the cervix was unnecessary, dangerous, incomplete and inefficient, and that the systematic search for the pelvic lymph glands should be abandoned. This had been his contention at the recent meeting at Niagara Falls, and he was surprised to find that not a single speaker at that meeting had put himself on record as enthusiastic in favor of that method. It was generally admitted, on the other hand, that cancer of the cervix extended very early into the parametrium. In 52 to 70 per cent. of the cases the parametrium was involved. This should induce one to remove this particular tissue together with the uterus. Unless that tissue was removed where the disease was most probable to recur, perfect results could not be hoped for from operative interference. The simple vaginal and the simple abdominal operations were not justified in cancer of the cervix, for neither of these removed anything but the uterus. Not a particle of the parametrium was left in continuity with the uterus, and it was just this tissue for at least an inch on either side, that was the focus of recurrence in four-fifths of the cases within the



first year. The operator should, therefore, not only extirpate the uterus and appendages and part of the vagina, but also the pelvic connective tissue. This could be done either from above or from below. If the vaginal method be preferred, not the ordinary method should be employed, but the so-called paravaginal method. A very deep incision was made, splitting the vaginal tube its entire length, cutting through the paravaginal tissue and through the levator ani, and, without touching the sphincter, curve around the anus to the median line. This did away with a deep vagina. There was only a shallow excavation left, about an inch or an inch and a quarter in depth, and the uterus and the base of the broad ligaments were within easy reach and absolutely open to sight. There was no working in the dark, and there should be no working in the dark in any vaginal operation. Where these vaginal operations were indicated, they could be done under the eye and finger. The vaginal method was not associated with those dangers encountered in the abdominal operations. While the mortality following the radical abdominal operation with extirpation of the glands was 21.5 per cent. plus, following this vaginal method it was only 12.4 per cent. One could extend the limits of the operation as far with the paravaginal as with the abdominal operation, and it was of very little importance to know whether the pelvic glands were involved. If they were, the case would die anyway; it was bound to have a recurrence. Whether one did the abdominal operation with extirpation of pelvic tissue, or the paravaginal operation, was largely

dependant upon the individual operator. The vaginal method may be more difficult to some operators, but if it were proved that that was the better method, then it was the duty of the operator to acquire that method, whether it was the more difficult or not.

Dr. A. R. Kieffer said he had occasion to tell the society several times that his views were the same as Dr. Gellhorn's. He had heard Baldy challenge the whole American Medical Association to have one man state he had done an operation for cancer of the cervix after clinical manifestations of the disease had appeared, and that the patient was absolutely well after five years, and not a man had answered the challenge. They did report about five such recoveries where the body of the uterus was involved. It seemed there was some truth in Baldy's statement that the operation for cancer of the cervix was surgery's disgrace. The speaker's opinion was that it postponed the fatal issue usually, but seldom cured the patient. The point made by Dr. Gellhorn that these lumbar glands were often involved when the pelvic glands showed no involvement, had been made by Carstens. He had operated some fourteen months ago upon a case, a very fair case, for a vaginal operation. As the patient was about to die on the table, he had simply done a high amputation of the cervix. In less than two weeks there was a return at the site of the wound. With that he had placed her under x-ray treatment and at present the woman was in pretty good health, but he did not think she would live five years. He believed, however, that the



operation and the x-ray together had done some good. For the removal of the pelvic tissue the operation suggested by Dr. Gellhorn was about as good as any.

Dr. John Young Brown believed the greatest drawback a surgeon had to contend with in dealing with malignancy of uterus and rectum was the fact that these cases seldom reached him until they had practically passed the operable stage. Carcinoma of the rectum, as a rule, was treated for months for "piles" before a diagnosis of malignancy was made. The same applied to malignancy of the uterus, this condition being given the usual preliminary treatment for "change of life." The importance of careful examination of all rectal and uterine conditions was now being strongly emphasized, and he believed this campaign of education would result most beneficially to surgeons.

In the surgery of malignancy of the rectum, it had been the practice of the speaker to deal with this condition by the combined operation: namely, the simultaneous assault from within the abdomen and below. The speaker expressed great interest in the statistics presented by Dr. Gellhorn. While serving as an assistant to Dr. Joseph Price, of Philadelphia, he heard him make the statement that ten cases of carcinoma of the uterus could be curetted and cauterized and ten hysterectomies performed, and that the ten upon which the minor procedure was done would live as long as those on whom the major operation had been performed. Dr. Gellhorn's statistics seemed to bear out this assertion. In dealing with malignancy of the uterus, the speaker very strongly

avored the abdominal route. He believed there was no condition involving the pelvis that could not be more satisfactorily handled from above than through the vagina. The arguments that have been used by the advocates of the vaginal route that this procedure was followed by less shock than was the abdominal operation, he did not think were well taken. He had seldom seen patients suffer to any great extent from shock following surgical dealing with pelvic conditions through the abdomen. Shock, in his opinion, was largely due to prolonged anæsthesia and slow and slovenly surgery. He had found that in fully 30 per cent. of patients operated on for pelvic disease, the appendix was involved. He believed, however, that excellent results were gotten both through the vagina and abdomen. Dr. Gellhorn had had exceptional opportunities for work by the latter method, and his skill enabled him to accomplish very much more by this route than could be accomplished by one whose training had been entirely along other lines.

Dr. Norvelle Wallace Sharpe raised the question as to whether the St. Louis Medical Society was ready to have it go on record that it believed operative work in cervical cancer of no avail. That, it seemed to him, was distinctly pernicious. First, it was not proven, and, second, it was highly discouraging to make such a prognosis to a patient. On the other hand, if the surgeon believed it to be a fact then he was in honor bound to follow the policy of Dr. Funkhouser and say to his patient, "If I operate on you, you must expect a recurrence." Nor, even, if recurrence was

the rule, should this prevent us from operating, nor should we in the slightest degree add discouragement to the patient who is already carrying a grievous burden. The challenge put up by Dr. Baldy several years ago could hardly be entered into; it was but a surgical bluff that had no scientific weight. Regarding the statistics so ably presented by Dr. Gellhorn, it was worth while remarking that his final statistics were for abdominal radical operation as opposed to the paravaginal, 24 per cent. to 12 per cent. That was unfair, for in the whole line of argument the abdominal radical operation had been excluded. He agreed with Dr. Brown in that he had not seen any cases of extraordinary shock, nor had he seen any bad results from the abdominal procedure, viewed solely as an abdominal procedure. He believed that, as yet, he could do better work with greater ease through the abdomen than through the vagina. In his judgment the extirpation of the parametrium per vaginam was distinctly more difficult and required a far greater degree of skill in the assistants; and it must, therefore, be remembered that they were considering an operation distinctly more difficult to carry out when operating through the vagina than by abdominal section.

Dr. N. J. Hawley agreed that the choice of route depended upon the way the man was accustomed to work. Leaving out the question of cancer and speaking of inflammatory troubles and growths of the uterus and ovaries other than cancer, the majority of cases could be relieved by the vaginal route, and only those cases where some trouble of the appendix was sus-

pected, or where there were dense adhesions, should be operated on through the abdomen. In many cases the abdominal route could be used after starting the operation through the vagina.

Dr. William H. Stauffer considered the case of carcinoma of the rectum a beautiful illustration of the necessity for early diagnosis of diseases of the rectum. Unfortunately physicians treated many of those cases without making any examination at all. The class of men who did that would not think of treating the throat or any other part of the anatomy without a thorough examination, but they would treat the rectum for years without doing so. He had recently seen a case treated by a neurologist for three years and there had never been an examination. The patient died of cancer of the rectum. Dr. Meisenbach was to be congratulated on the results obtained. It was unfortunate that the patient died of an intercurrent disease.

Dr. Kieffer said that one of the objects of operation was to postpone death, but he still insisted that many of the cases that appeared in reports as cured, did not remain well.

Dr. Gellhorn said he was not as pessimistic as some of the other gentlemen. If a man were pessimistic there would be no inducement for him to operate at all. He had not prepared himself for this discussion and he had not the statistics at hand to answer exactly the questions asked. It was only those statistics he had prepared for the American Gynecological Society that were fresh in his memory, but there were a number of cases on record of patients having



lived free from the recurrence for more than three years; for instance, there was this first patient already referred to who was operated on in 1878, and there also were a few others in which even after a simple high amputation of the vaginal portion the disease had not recurred. He was fully aware that the word statistics had a doubtful tone in the ears of many, but he was only referring to those cases where the diagnosis had been made by the microscope, and he had only referred to men whose veracity was beyond question and whose authoritative position was recognized everywhere. The radical abdominal method was not yet five years old, therefore reliable statistics covering this period of time were not at hand. The paravaginal method, which he had wished to advocate was twelve years old. Of twenty-five surviving cases forty per cent were free from recurrence five years or longer after operation. Of thirty-nine surviving cases of Mackenrodt, fifty per cent were free from recurrence three and a half to six years after operation. As far as the permanent freedom from recurrence was concerned the literature on the subject had been reviewed by Winter in 1902. He gave the permanent results of the simple abdominal and the extended abdominal, the simple vaginal and the paravaginal hysterectomies, in fact all of the different methods in use, and it could be easily ascertained what the results of the respective methods were.

Dr. Meisenbach, in closing, said he did not anticipate that the presentation of these specimens would raise so much surgical dust. John Mc-

Dowell's old saying, that seeing is believing, but feeling is the naked truth, should be reversed in this case. In spite of all that had been said in opposition to the abdominal route, he believed that in the majority of cases the abdominal route was still the route of selection for the average man. Morris, in appendiceal operations, liked an incision an inch and a half long and the patient eight days in bed, and that was all very well in an ideal case seen within the first forty-eight hours, but it was not the method suited to the average case. The speaker was glad Dr. Brown had stated that there need not be extensive surgical shock in opening the abdomen. It was unnecessary to expose the intestines in the manner that was sometimes done. If the bowels had been thoroughly cleaned out and the anesthetist kept the patient under complete anesthesia there need be very little handling of the bowels provided the adhesions be not extensive. Of course, where that was the case, the bowels must be handled more or less, otherwise they could not be carefully kept out of the way if thorough packing was done. No one who had studied the anatomy of the pelvis, of the lumbar region and of the mesenteric glands, would believe for a moment that the tearing out of the pelvic glands could be compared with the operation on the breast, for there was an entirely different relation, therefore the statistics of cure of cancer of the breast were superior and for an anatomical reason. Dr. Moore had asked the difference in longevity between those patients operated upon and those not operated upon. In all these cases of carcinoma of the cervix



there was the important factor of hemorrhage. It was the irregular and profuse hemorrhage that pulled the patient down most rapidly. It was in this condition that perhaps the medical man was negligent because he did not interpret it rightly. Many of the cases operated upon so brilliantly were taken in the very early stage. He had seen Winter (Berlin) place a patient on the table with the diagnosis not made. The microscopist was at his side and if there was any doubt on the subject the extirpation was done. That was why the statistics from across the water were so much better than they were here. If the operation could be done before there was an involvement of the pelvic, lumbar and posterior mesenteric glands there was a chance for the patient. Dr. Moore would not for a moment deny treatment to a case of tuberculosis where the prognosis was bad. Why should the surgeon deny treatment when he knew positively that he at least prolonged the chances of the patient's life and there was the possibility of bringing some comfort to the patient, for even where a lethal outcome was unavoidable it was an

undoubted fact that these patients did not suffer to that degree as those left alone. Where the uterus had been removed, when recurrence did take place it was not connected with so great a degree of suffering. Even from this standpoint the surgeon was justified in performing the operation. Of course this whole question was in just about as undecided a position as it was a number of years ago, and it would still be for a long time to come. It was the same as with tuberculosis. The remedy was known, but it could not be applied so that it would reach the site of infection. If the focus could be reached and reached in time, the disease could be cured, and not until then. It was a fact that since radical operation had been introduced the number of recoveries reported and the length of life had been increased. The anatomical conditions between the two forms of the disease were radically different and it would never be possible to do as radical an operation, even with the attempt to clear out the glands, as in operations on the breast where the glands were readily accessible.

## A PRACTICAL, NOVEL AND RATIONAL TREATMENT OF GAPING WOUNDS, FOLLOWING EXTENSIVE SEPTIC INFECTION.\*

BY J. F. MENESTRINA, M. D., of St. Louis.

There is hardly a subject in surgery that appeals for conservative, yet heroic, surgical treatment more than septic conditions. It is really pitiful to see how often the busy surgeon neglects this most important class of cases, either through fear of contamination or for other reasons. Frequently we see a feeble attempt made in the way of incisions and proper drainage.

The object of this paper is to show that one need not hesitate in laying open, by free incisions, phlegmonous deposits of all sorts, when subsequently they can be quickly repaired without much pain and disfiguring. The duty of the modern surgeon is not confined solely to the proper opening of every recess and drain of septic conditions, but, as soon as the infection has subsided, to restore the large, gaping wounds to a state of as near normal condition as possible with the least visible mark of traumatism, and in quick time. Heretofore this class of wounds was allowed to gradually heal up by granulations, subsequently by cicatrization, frequently by skillful skin grafting. That this takes a long time and causes much suffering is conceded. The result is, an unsightly cicatrix that offends the eye. With the treatment instituted in a dozen or more cases of this nature, this was all avoided. All cases selected were of the most virulent type of streptococcus infection,

and in no case complete union failed to occur shorter than ten or twelve days after the incipency of the infection. The patient I present is an example of the results obtained by the method described.

Fr. D., a laborer, age twenty-four years, was admitted to the Protestant Hospital, June 3, 1905, with a very painful swelling of the left arm; temperature, 105° F.; pulse, 130, very weak and thready. He was a very sick man. A small opening in the hand had been made in an attempt of drainage, but it was insufficient for the purpose. On pressure near the elbow, the pus spouted out in a stream from this opening, showing the extent of the pocket. Without hesitation I laid open the entire arm to the elbow, the wrist and dorsum of the hand. Only then I could realize the extent of the destruction wrought on subcutaneous structures. I could lay my entire hand in the folds of the wound. The infiltrated condition, devitalized by the suppression of the normal circulation, had already succumbed to the inroad of millions of micro-organisms, which microscopical examination proved to be the dreaded streptococcus. All subcutaneous structures, superficial fascias, lymphatics, etc., were involved in the necrotic process, the veins also participating in the disturbance. Thrombosis was present, intensifying the existing stagnation. The bottoms of this pocket were counter-opened freely, and the

\* Read before St. Louis Medical Society, July 1, 1905.

wound was packed very gently with loose iodoform gauze, no attempt being made of forcibly washing or curetting the cavity. (I want to emphasize this point, for the thrombosed condition of the veins is a work of nature. It is a protection for the prevention of metastasis, and under no circumstance should it be interfered with. The forcible curetting out of this work of nature, as is practiced so often, disseminates the infection and interferes with provident nature's work.) Moist gauze, soaked in normal salt solution, was next applied, then cotton liberally encircled the arm; rubber tissue and bandage last.

The arm was elevated on pillows, and hypodermics of codeine sulph. given liberally, to the comfort of the patient. Dressings were not removed until the third day. Sloughing surfaces had begun to separate and here and there granulation had started. The wound was packed gently again, preceded by light irrigation of normal salt solution. This procedure was repeated daily until the seventh day, when every vestige of slough had separated, and healthy granulation filled the pocket. He was placed then under an anæsthetic, the wound was thoroughly scrubbed with a sterile brush, and squeezed dry by gauze sponges; then mopped out quickly with 1-500 sol. of bichloride mercury; then immediately irrigated with normal salt solution. The wound edges, which had separated two

inches in width by infiltration, had to be resected loose, to allow the edges of the skin to come together.

A thin slice was removed from the edge, to make possible adhesions, and the wounds were boldly united by silkworm sutures. The tension at places was intense, owing to infiltration of the tissues, especially the wrist, where I was compelled to make parallel incisions to allow approximation of the edges of the wound. I was gratified to get union by first intention, and sutures were removed on the fifth day. A little necrosis occurred at the wrist, owing to the great tension, but this healed rapidly by granulation. From the incipency of this most virulent form of destructive process, to the time of removal of the sutures, only twelve days had elapsed to complete union.

In conclusion, I would make a strong appeal to those who come in charge of such cases to follow this form of treatment, and they will be gratified at the almost incredible result. Undoubtedly a great number of streptococci must still be present at the time of suturing the wound; what becomes of them has been an enigma to me. If alive, they must be rendered innocuous and are absorbed by the granulations, or are forced into the general circulation by the tension of the tissue in suturing. What I am positive of is, that if any are left after the procedure above described, they cannot interfere with nature's work of repair.



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## EDITORIAL.

### THE ST. LOUIS CITY HOSPITAL.

From the ruins of the old city hospital, destroyed by the cyclone in 1896, there has arisen, phoenix-like, a magnificent institution built on the pavilion plan which fairly represents modern ideas of hospital construction. While only five of the fourteen buildings are completed thus far, room has been provided for 400 patients. The sick poor of St. Louis can hereafter have such surroundings as should be furnished by a great city. The wards are supplied throughout with a ventilating system which assures abundance of fresh air. The plumbing is modern in every respect and the system of heating is the latest and most approved. The twin operating rooms should be on the third instead of the second floor and the opal glass flooring and wainscoting will undoubtedly be changed, as the glare is decidedly objectionable.

Now that St. Louis has a charity hospital which compares favorably

with those of other great cities, the city council should be impressed with the necessity of having the institution conducted as is done by all other great municipalities; first, for the benefit of the city's sick poor, by providing the most skillful medical attention; second, for the benefit of the undergraduate student, by providing instruction in practical medicine, and third, for the benefit of humanity in general by providing post-graduate opportunities for the medical profession.

The institution should be under the jurisdiction of medical directors to be appointed by a governing board. The governing board should also appoint a layman-superintendent, who would be the executive head of the hospital. The medical board should appoint a house surgeon, who would be an assistant to the superintendent, and a visiting staff consisting of surgeons, internists, gynecologists, neurologists, obstetricians, laryngolo-

gists, dermatologists, oculists, otologists, pediatricists, pathologists, and dentists, each for a period of six months or one year. The internes should be selected by competitive examination held by the visiting staff.

Then the pauper sick would be given the advantages (now enjoyed only by those more fortunate) of the best medical treatment; the undergraduate student the greatest possible advantage in clinical medicine; and the medical profession the opportunity of dealing with a number of interesting cases which otherwise might escape notice.

An able paper on the subject was read last winter by the retiring president of the Medical Society of City Hospital Alumni, but so far as is known, nothing definite has been accomplished. The time has arrived for the medical profession of St. Louis to unite in an effort to secure the desired legislation.

### COUNTY ORGANIZATION.

The unification of the medical profession has been the slogan since the reorganization plan was adopted in 1891. The spirit which permeates the profession in the organized as well as unorganized states is the direct result of this new plan advocated but four years ago. The marked improvement in conditions is apparent to the most casual observer. In this plan of reorganization the importance of the county society is the recognized fundamental principle; hence every effort has been made to develop the county or local society. Dr. McCormack as chairman of the committee of organization has been devoting a large part of his time in the past

few years to organization work. Hereafter all his efforts will be devoted to building up the county society. He has gone from county to county and state to state and acquired a knowledge and experience which can be imparted with great benefit to the practitioner as well as stimulate the local societies to emulation.

The machinery all over the country is practically complete, and results must now be looked for. To the county society we must look for the solution of many of the perplexing questions. The local organization should educate the people against quackery and the nostrum evil, and methods adopted as to how best deal with same. Again through it, better relations between the pharmacist and physician must be brought about. The spirit of "Unity, Peace, and Concord," as well as scientific progress will be fostered. The society germinates a sense of professional pride. The offender in professional conduct and courtesy may be reproved not by bringing such an one to trial, but by admonition and reasoning of the censor, who should always be able to play the role of peacemaker and reformer. Often through ignorance a physician will permit his name to come before the public in a manner obnoxious to the profession. In the majority of cases private and moral suasion will suffice in making such an one desirous of standing among his fellows. The society will do away with unnecessary criticism of each other and have more peace conferences and fewer battles.

In the crusade which is now being waged against tuberculosis the county society should be the potent factor.

Through it the people should be taught how to live so as to escape this awful scourge, and in this the doctor should be what the name signifies—a teacher.

It is only through organized effort that the best results can be accomplished, and in this scheme of organization "the county or local organization is recognized as the most important; next the state organization, and of least importance the American Medical Association." Every effort that has been made by the American Medical Association in developing and completing the organization has been with the above principle in view and when once perfected it will be a power for good, whose limit knows no bounds.

S. S.

#### JUDICIAL COUNCIL.

At a recent meeting of the Executive Committee of the Judicial Council, the members were disposed to criticise harshly some advertisements of proprietary remedies carried by the JOURNAL, and decided to discontinue all those where the formula was not known or where claims not founded on fact were made. The correctness of the decision of the committee is beyond question.

While it may be considered within the province of a medical journal to bring to the attention of its readers, through its advertising columns such preparations as are meritorious, no article should be advertised unless the chemical formula be given, or in the case of a pharmaceutical compound unless the name and proportion of each active ingredient appear.

That many advertisements may be lost is quite probable, but the time

has arrived when a firm stand should be taken, not only by the *Journal of the American Medical Association* and state journals, but by all reputable medical journals.

#### WORTH COUNTY.

That the councillor of the third district is wide awake we do not question. Through him the Harrison County Medical Society affiliated with the State Medical Association during August, and on September 15th the Worth County Medical Society made application for a charter. We congratulate Dr. E. H. Miller on his success in demonstrating to the physicians of unorganized counties the advisability of becoming a part of the State Medical Association.

#### THE LOCAL COMMITTEE ON THE PREVENTION OF TUBERCULOSIS.

It will be remembered that a resolution was passed at the last meeting of the state association asking that each county society appoint a special committee on tuberculosis. The intention is to have these committees gather, as far as possible, statistics from the members to be used by the state association. Also to use whatever methods may be best suited for arousing local interest and giving instruction for the safety of the home and the prevention of disease in the school, shop and store. These committees should be appointed very early so that results may be forthcoming within the year.

Missouri is well in advance in the practical work of prevention of tuberculosis. Our state sanatorium will undoubtedly be a success. The Board



of Commissioners hope to make such a good showing that they can expect the hearty support of every member of the profession when more state aid is needed. Already much time and thought has been given and a site selected which seems to be most excellent. The work is, however, only in its incipency. It should not be confined to building and maintaining an institution. While this is valuable it can only directly benefit probably less than five per cent. of the cases of consumption in the state. The same is true with the city and private sanatoriums now building in different places—the main benefit is educational. It is needed that something teach the people that tuberculosis is limitable, and in the early stages is curable. The sanatorium will help to do this. Then these committees from county societies can oversee the distribution of instructive literature and provide for lectures and inspection. When consumption is understood by the people to be in the same class of parasitic diseases as small-pox, diphtheria and cholera, and that it can be limited by similar care and knowledge, the question of prevention is ready for solution. Our state is in excellent condition for thorough agitation of this subject. While the ultimate call to action is with the public, the teachers and the law-makers, the immediate responsibility is with the medical profession.

In two ways can this responsibility be met. First, by local organized effort; second, by united support of our State Sanatorium, and by insisting that it shall be not only a home for the individual sufferer, but a center of education for the people whose

representatives have furnished the means for its establishment.

Let each member of the State Association, and each officer of county societies appreciate that the work is not more the duty of the specialist or a central committee than it is his duty, admitting neither of transfer nor delay. Light is breaking in on us as to the methods of combatting tuberculosis and the issue must be met squarely and intelligently. Let us have the local committees formed at once.

W. P.

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#### OBITUARY.

Dr. Adolphus Schlossstein died at his residence in St. Louis on August 28th. Dr. Schlossstein was stricken with apoplexy and his death resulted from that. Born in Bavaria in 1841, Dr. Schlossstein attained a thorough medical education in Germany and served some time in the hospital corps of the German army before coming to St. Louis in 1867. He was a member of the St. Louis Medical Society and of several German societies.

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Dr. Will Rininger, of St. Louis, died at his home on August 22th, as a result of burns received from the explosion of benzine while working in his laboratory. He was born in Tiro, Ohio, and was thirty-two years of age. He graduated from the Marion-Sims Medical College of St. Louis in 1899. He was assistant to the chair of nervous diseases at the Marion-Sims Medical College, and chief of the clinic of nervous diseases at St. John's Hospital. He was a member of the St. Louis Medical Society and the American Medical Association.

Dr. Henry D. Stauf, of St. Louis, disappeared from his home on July 28th and on August 12th his body was taken from the Mississippi river at Barrows, Tennessee. Dr. Stauf had been in poor health for some time and it is supposed he wandered to a favorite fishing resort near Barrows and was accidentally drown. He was forty-two years of age. He was graduated from the Missouri Medical College (medical department of Washington University) in 1885.

#### NEW MEMBERS.

Andrews, John. Grant City.  
 Bonning, A. H., Lincoln.  
 Broyles, F. H., Bethany.  
 Bryson, E. H., Bethany.  
 Buckley, J. F.  
 Bunch, B. F., Bloomington.  
 Carter, Howard, Webster Groves.  
 Chiff, J. K., New Hampton.  
 Davenport, R. G., Trenton.  
 Dove, J. D. F., Allendale.  
 Eads, E. H., New Hampton.  
 Eimbeck, A. F., New Haven.  
 Eimbeck, W. F., New Haven.  
 Ellis, C. A. Maryville.  
 Foster, J. P., La Crosse.  
 Gately, Villa, Grant City.  
 Gebhart, A. C., St. Joseph.  
 Gibson, H. C. Maryville.  
 Gwinn, G. E., Bethany.  
 Hale, Jesse W., Greenville.  
 Hempker, W. H., Catawissa.

Jones, C. H., Brunot.  
 Lemon, F. F., Lincoln.  
 Long, A. C., Denver.  
 Mason, L. O., Bevier.  
 McKinley, W. E., Grant City.  
 McLemore, T., Nevada.  
 Mills, H. P., Sheridan.  
 Mills, O. P. M., Grant City.  
 Mitchell, C. A., Blythedale.  
 Moore, T. E. Edinburg.  
 Nesbit, Dr., Sheridan.  
 Noblitt, Wm. D., Lively.  
 Nulton, Ida M., Livonia.  
 Phipps, J. K., Grant City.  
 Rice, Dr. Boonville.  
 Robertson, C. H., Eggleville.  
 Robertson, C. W., Ridgeway.  
 Robertson, W. A., Allendale.  
 Russell, John J., Deepwater.  
 Rutledge, J. E., Festus.  
 Salyer, C. E., Callao.  
 Sellers, C. J., Mt. Moriah.  
 Simpson, A. J., Chillicothe.  
 Smith, T. J., Grant City.  
 Snow, Edward A., Union.  
 Stewart, B. S., Bethany.  
 Stierberger, E. A., Union.  
 Stonington, E. L., Mt. Moriah.  
 Thompson, L., Macon.  
 Vandwert, A. H., Bethany.  
 Wiley, W. H., Ridgeway.  
 Williams, A. W., Ridgeway.  
 Williams, D. E., Lone Dell.  
 Wilson, E. H. G., St. Louis.  
 Woods, Dr., Cape Girardeau.  
 Wyllie, Barnett, D. S., Union.

## COUNTY SOCIETY NOTES.

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### BUCHANAN COUNTY MEDICAL SOCIETY.

Dr. P. I. Leonard, President.  
Dr. Charles W. Fassett, Secretary.

The Buchanan County Medical Society held its first meeting since its summer vacation on September 2d, with a large attendance. Dr. P. I. Leonard, president, in the chair.

A symposium on medical education aroused considerable interest, and a lively as well as profitable discussion ensued. Papers were read by Drs. T. E. Potter, O. B. Campbell and W. L. Kenney.

Interesting clinical cases were reported by Drs. W. T. Elam, A. L. Gray and F. A. Patterson.

On motion of Dr. J. M. Bell, a standing committee of the society was appointed to look into the credentials of irregular practitioners, not regularly registered, as well as to stop all itinerant quacks who are not legally registered in the county. The committee consists of Drs. J. M. Bell, W. T. Elam and O. B. Campbell.

On motion of Dr. Elam, the society passed a resolution introduced by Dr. Donelan, asking the local board of health to demand a report of all cases of incipient and later stages of tuberculosis in school children from the physicians who know of or treat such cases.

The subject chosen for discussion at the next meeting on September 16th is typhoid fever, opened by Dr. McGlothlan.

C. A. GOOD, Reporter.

### CALLAWAY COUNTY MEDICAL SOCIETY.

Dr. J. F. Harrison, President.  
Dr. Martin Yates, Secretary.

The Callaway County Medical Society held a meeting in the office of the secretary on September 14th, Dr. Harrison presiding. Eight members were present. Dr. P. E. Williams, superintendent of State Hospital No. 1, transferred his membership from Cooper county to Callaway county.

Dr. A. E. Cordonier, pathologist to the State Hospital, presented two specimens, one a stomach illustrating carcinoma of the pylorus taken from a man aged forty-five. The other was also a stomach from a man aged eighty, showing ulcers of the pyloric portion and general gastritis. This specimen was abnormally contracted with hypertrophied walls.

Dr. Owen, of Fulton, read a paper on "Erysipelas." This was well received and aroused a very interesting discussion.

Dr. Baker, of Fulton, read a paper on "Appendicitis." Special attention was directed to the indications for surgical intervention and the best time to operate. A general discussion followed the reading of this paper.

This is the first meeting Calloway County Medical Society has held for several months. The next meeting will be held in October and we look forward to an interesting report of this meeting.

MARTIN YATES, Secretary.



### CHARITON COUNTY MEDICAL SOCIETY.

Dr. H. C. Tatum, President.

Dr. C. A. Jennings Secretary.

Chariton County Medical Society convened in regular session on August 31st at Salisbury, the president, Dr. Tatum, presiding. Minutes of last meeting were read and approved.

Dr. Welch presented a child of ten months, female. The mother stated that en route to St. Charles five months ago, the child had a convulsion and another later while at home. The seizures did not come on at any stated time, the longest interval between attacks being four weeks. The child was cutting teeth and has two incisors; temperature never over 102°. The case was discussed, the general opinion being that the convulsions were epileptiform. A number of other clinics were introduced and the cases generally discussed.

As the time had been almost wholly occupied with the clinics, the papers were omitted and the essayists, Drs. Jennings, Gaines and Burton were requested to present their papers at the next meeting which will be held at Salisbury on September 29th.

W. L. BAKER, Reporter.

### GRUNDY COUNTY MEDICAL SOCIETY.

Dr. N. E. Sutton, President.

Dr. W. H. Winningham, Secretary.

The regular meeting of the Grundy County Medical Society was called to order by the president, Dr. Asher, on July 26th.

Officers for the ensuing year were elected as follows: President, N. E. Sutton; vice-president, J. H. Addington;

secretary and treasurer, W. H. Winningham.

On motion the office of secretary and treasurer was combined.

Dr. Addington, the delegate to the state meeting, made his report. On motion the president was appointed chairman of the committee on scientific communications. The following committees were appointed:

Arrangements—Drs. S. Stewart, W. C. Hunter, J. A. Travis.

Judicial—Drs. J. A. Asher, S. Sheldon, J. M. Stone.

Scientific Communications—Drs. N. E. Sutton, J. B. Wright, W. H. Winningham, J. H. Addington.

Medical Education—Drs. A. L. Hough, Bertha Wiggins-Sutton, W. H. Winningham.

Publication—Drs. W. D. Fulker-son, J. A. Asher, S. Sheldon.

On motion Dr. Addington and Dr. Wright were requested to prepare papers for the next meeting.

W. H. WINNINGHAM, Sec'y.

### JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robert T. Sloan, President.

Dr. Max Goldman, Secretary.

The Jackson County Medical Society held its first regular meeting of the season at the Midland Hotel, Kansas City, Thursday evening, September 14th, the president, Dr. Robert T. Sloan, in the chair.

Preceding the regular professional program, remarks from members relating to any interesting cases on hand were called for, and Dr. Scott P. Child opened a general discussion on the early clinical diagnosis of diphtheria and the use of immunizing doses of antitoxin. He reported some

recent cases illustrative of the value of early clinical diagnosis. The report was discussed by Drs. C. Lester Hall, E. L. Stewart, A. J. Welch, H. E. Pearse, J. W. Kyger and E. G. Mark.

The program of the evening consisted of a paper on "Drainage in Pelvic Surgery" by Dr. T. J. Beattie, and a "Report of Some Recent Surgical Cases" by Dr. A. L. Fulton.

The subject of drainage in pelvic surgery is one which has been for many years of great interest to surgeons in general and gynecologists in particular. Though the question as to the advisability of drainage has undoubtedly been settled long ago, the method of draining the pelvic cavity properly is a problem regarding which there is still some difference of opinion. The paper by Dr. Beattie on this subject had for its object the demonstration of the most practical way of draining the pelvic region, and his idea was stated emphatically in the last sentence of the essay: "Cul-de-sac (Douglas's) drainage is the most desirable method; drain by packing loosely with gauze and withdraw a little of the gauze each day."

The essayist reviewed the history of drainage in pelvic and abdominal surgery, and after stating that drainage is an absolute necessity when pus has escaped into the pelvis or abdomen, he added that even though we may find sterile (gonorrheal) pus, or whenever there is a suspicion of a mixed infection, drainage should be employed. He then stated his objections to the use of the glass tube in the abdominal incision, and of gauze packing in ordinary pus cases, and considered the value of cul-de-sac

drainage by means of iodoform gauze.

The discussion of this paper was opened by Dr. H. C. Crowell, who stated that the style of drainage often depends upon the judgment of the surgeon in each individual case. However, every pus case must be drained, not only in order to protect the tissues infected, but also to draw off all infecting material. (Glass tubes, he said, not only do not draw off the fluids, but allow the entrance of bacteria to the wounded area. Often pelvic drainage per vaginam is used in addition to abdominal or peritoneal. In cul-de-sac drainage of pus cases, or whenever a large denuded surface is left, as after hysterectomies, a rubber tube should be used in addition to the gauze; this is of value in the removal of excessive amounts of serous exudate. Dr. Crowell closed by considering the time one ought to leave the gauze drain undisturbed; his custom is to let it remain from five to eight days for the purpose of allowing a framework of granulation tissue to grow up; more satisfactory conditions are thus presented, the gauze is more easily removed and subsequent dressings are rendered easier.

Others taking part in the discussion were Drs. C. Lester Hall, E. Von Quast, O. H. Parker, B. L. Eastman and A. E. Hertzler. Dr. Beattie closed the discussion.

Three recent surgical cases were reported by Dr. A. L. Fulton. The first was a case of direct inguinal hernia in a man aged thirty-five years. The ordinary careful preparations were made, and no unusual conditions were observed at the time of operation. The patient, however, on the second day after the operative inter-



ference, gave positive symptoms of intestinal obstruction and died twelve hours later. Just before his death he remarked that on the evening before operation he had, after considerable difficulty, reduced the hernia, which had descended and did not return as usual when he retired. At the autopsy there was found a large knuckle of ileum totally gangrenous and lying against other parts of the intestines.

The second case reported was one of adeno-carcinoma of the descending colon, causing almost total occlusion, in a woman fifty-eight years of age. The portion involved was removed and an artificial anus was formed in the ordinary manner. Since this operation the patient has improved very much and has gained in weight considerably in the last few months.

The third case reported by Dr. Fulton was an extra-uterine pregnancy in a young unmarried woman. The interesting features of this case were, first, an extremely large collection of blood in the postuterine cul-de-sac after an attack of sudden pain in the abdomen, and apparent collapse, with very rapid pulse but normal temperature, for which vaginal celiotomy was performed, followed by her rapid recovery; and, secondly, after her removal from the hospital, hysterical manifestations, which were characterized by the gradual development of mental disturbances followed by a comatose state so profound that involuntary actions from the bladder and rectum took place, though occasionally she would rally sufficiently to take some nourishment. These conditions of improvement and relapses continued for four weeks, and

were then followed by complete recovery. The question of greatest interest seemed to be: "What was the circumstance that produced the hysteria in this case of extra-uterine pregnancy in an unmarried girl of eighteen years, who had been previously in apparently good health and always regular in her menstrual periods?"

Dr. Howard Hill discussed the cases and Dr. Fulton closed the discussion.

The society adjourned till its next regular meeting, September 28th.

MAX GOLDMAN, Secretary.

### ST. LOUIS COUNTY MEDICAL SOCIETY.

Dr. H. G. Wyer, President.

Dr. H. T. Randle, Secretary.

Regular meeting of the St. Louis County Medical Society convened at Clayton, September 13th, the president, Dr. Wyer, in the chair. The following members were present: Drs. Wyer, Carter, Armstrong, Higgins and Moore. In the absence of the secretary, Dr. Armstrong was appointed secretary pro tem. Minutes of the last meeting were read and approved.

The essayist for the evening, Dr. Gallagher, was not present and failed to send his paper to the meeting. Dr. Carter moved that the secretary be instructed to collect \$1.00 from Dr. Gallagher as a fine for having failed to send in his paper to be read before the society. The motion carried.

Dr. Moore moved that the president appoint a committee of three to draft a circular letter setting forth the advantages of membership in the county society, and inviting all physicians in the county to become members; that this letter be mailed to all members



in the county who are not now members of the St. Louis County Medical Society.

Dr. Carter moved to amend the motion so that the president shall be included in the committee. Carried. The president appointed Drs. Carter, Moore and Higgins.

The president reported two interesting cases from his practice, one a confinement with high forceps delivery. A high fever developed on the eleventh day, although there were no septic conditions nor malaria. The probable diagnosis was colitis. The other case reported was typhoid fever in an infant of fifteen months.

Dr. Moore reported a case of severed tendo-Achilles. Two unsuccessful attempts were made to suture the segments. Union finally resulted by cicatrization.

Dr. Moore extended an invitation to the society to meet at his residence in Webster Groves in October, which was unanimously accepted. The next meeting will be held on the second Wednesday in October at the residence of Dr. Moore in Webster Groves.

C. L. ARMSTRONG,  
Secretary Pro Tem.

#### NODAWAY COUNTY MEDICAL SOCIETY.

Dr. F. R. Anthony, President.  
Dr. L. E. Dean, Secretary.

Nodaway County Medical Society held its regular meeting in Maryville on September 12th. There being only six members present, the regular business of the society was postponed, and the scientific program was taken up as follows: "The Dangers of the

Curette and Intrauterine Applications," by Dr. G. A. Nash; "The Present Status of Nodaway County Medical Society," by Dr. E. L. Crowson.

Dr. Nash was unable to be present on account of illness, and Dr. Crowson's paper was read. In an able manner the essayist presented the reasons why our county society did not have better attendance of members, especially of those from the smaller towns in the county. It was suggested to write each member that he would be expected to read a paper at some future meeting of the society, the title to be forwarded to the secretary, who would make a list and arrange for the dates of reading so as to insure the presentation of two or three papers at each meeting. Dr. Crowson's paper brought out an interesting discussion of this subject from all the members present. We hope that future meetings of our society will be attended by every member. Excellent programs have been arranged but the attendance has not been as large as it should be. Our regular meeting place is now in the hall of the Carnegie Library in Maryville, and a more desirable meeting place could not be found. It is earnestly urged that all members make an effort to attend every meeting.

Members present: Drs. F. R. Anthony, W. M. Wallis, A. B. Allen, J. W. Dean, E. L. Crowson, L. E. Dean. Visitor, Dr. A. F. Fisher of Maryville.

The next regular meeting will be held on October 10th, in Carnegie Library Hall, Maryville.

L. E. DEAN, Secretary.

### RANDOLPH COUNTY MEDICAL SOCIETY.

Dr. G. O. Cuppaigne, President.  
Dr. W. M. Dickerson, Secretary.

Randolph County Medical Society held its regular meeting in Moberly on September 13th, the president, Dr. Cuppaigne, in the chair. Dr. Claker-son read a paper entitled "Ownership of Prescription." The members expressed their high appreciation of this paper, and the points brought out by the essayist were generally discussed.

The next meeting will be held in Moberly on October 10th.

S. C. ADAMS, Reporter.

### BARTON COUNTY MEDICAL SOCIETY.

Dr. G. D. Allee, President.  
Dr. J. L. McComb, Secretary.

Barton County Medical Society was unable to meet at the stated period on August 3d, on account of high water and heavy rains. The next meeting will be held in November, when it is hoped there will be a full attendance of the membership.

J. L. McComb, Secretary.

### CARTER-SHANNON COUNTY MEDICAL SOCIETY.

Dr. F. Hyde, President.  
Dr. J. A. Chilton, Secretary.

The regular quarterly meeting of Carter-Shannon County Medical Society failed to transact any business on account of the lack of a quorum. The next meeting will be held in November, and a full attendance of the members is earnestly desired. A report of this meeting will be promptly forwarded to the JOURNAL.

J. A. CHILTON, Secretary.

### FRANKLIN COUNTY MEDICAL SOCIETY.

Dr. H. A. Booth, President.  
Dr. A. C. Brown, Secretary.

The regular monthly meeting of the Franklin County Medical Society was called to order in the office of Drs. Booth & McNay, at Pacific, on September 5th. Among those present were Drs. J. P. Dunnigan, A. L. McNay, E. L. Hume, W. H. Kempker, John Rusk, E. McD. Rusk, William F. Eimbeck and A. C. Brown.

A number of cases were reported. The discussion of the treatment and management of these cases proved of great interest.

Dr. E. L. Hume read a paper entitled, "Hospital and Aseptic Conditions in Country Practice." A general discussion of the paper followed.

Dr. John Zahorsky, of St Louis, has kindly consented to read a paper before the society at its next meeting in December. It is earnestly hoped that every physician in the county who can do so will be present at this meeting.

A. C. BROWN, Secretary.

### HENRY COUNTY MEDICAL SOCIETY.

Dr. W. M. Shankland, President.  
Dr. F. M. Douglass, Secretary.

The program prepared for the regular meeting of Henry County Medical Society was of exceptional interest. The meeting was announced for September 11th, at Clinton, and it was anticipated that there would be a large attendance and an interesting discussion on the papers to be read. The four members who arrived, therefore, were greatly disappointed, and

for the lack of a quorum adjourned until the next meeting. Those present were: Drs. F. M. Douglass, R. D. Haire, J. H. Britts and W. H. Benway.

The time of meeting has been changed from monthly to quarterly, and the next meeting will be held on the second Wednesday in December.

Dr. John J. Russell, of Deepwater, has renewed his membership with the society.

F. M. DOUGLASS, Reporter.

### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.

Dr. H. W. Elders, Secretary.

Jefferson County Medical Society met in regular session at the Alta Vista Sanitarium, in De Soto, on August 22d.

The president appointed Drs. Geo. W. Tidwell, J. W. Pickel and H. W. Elders a committee on public health.

Several very interesting papers were read and made the subject of a general discussion.

After the conclusion of the scientific program the members were entertained with refreshments and cigars and an informal discussion of the society's progress was taken up. All the members present enjoyed the meeting very much and decided that this sort of sociability was just what is needed to bring the members together. H. W. ELDERS, Secretary.

### LAFAYETTE COUNTY MEDICAL SOCIETY.

Dr. P. S. Fulkerson, President.

Dr. C. T. Ryland, Secretary.

The extremely bad roads and heavy rains prevented the majority of mem-

bers of Lafayette County Medical Society from attending the September meeting which was scheduled for September 12th. As there was a quorum present, routine business was disposed of and a special meeting was called for the second Tuesday in October, when the program arranged for the September meeting will be carried out.

Dr. C. T. Ryland was appointed to represent the society on the scientific program of the next annual meeting of the State Association.

We look forward to an interesting report of the October meeting.

C. T. RYLAND, Secretary.

### NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. W. Lamson, President.

Dr. Horace Bowers, Secretary.

The regular monthly meeting of the Newton County Medical Society convened at the court house in Neosho at 2 P. M. on September 5th, twelve members being present. The majority of the physicians in Newton county are members of the County Medical Society and the meetings are full of interest and profit for them. Our society is in a good healthy condition. Usually we have two papers read, followed by discussions and reports on clinical cases. All the members are requested to report interesting clinical cases and present patients at the meetings, where they can be examined by the members and the conditions made the subject of profitable discussion. Presentation of these cases adds greatly to the success of the meetings.

Some of the papers that have been read at former meetings will be for-



warded to the JOURNAL for publication.

The next meeting will be held on October 10th.

HORACE BOWERS, Secretary.

### HARRISON COUNTY MEDICAL SOCIETY.

Dr. A. H. Vandwert, President.

Dr. W. H. Wiley, Secretary.

Harrison County Medical Society was organized in August and admitted to full affiliation with the State Association. The first regular meeting was held at Bethany on September 12th. The attendance at this meeting was not as large as had been anticipated, owing to a counter attraction in the shape of a street fair in Bethany. A large proportion of the membership, however, attended the meeting, and what was lacking in numbers was made up in the interest and enthusiasm of those present.

The president was called to Maryville to fulfill his duties as regent of the Northwest Missouri State Normal School, and in his absence Dr. C. A. Mitchell was called to the chair.

Dr. Gwinn read an able paper on "Otitis Media," in which he explained many of the stubborn problems encountered in the diagnosis and treatment of this disease.

Dr. Mitchell read a paper on "Professional Affiliations." This was a splendid essay on the duties of physicians one to another. Dr. Wiley reported a recent case of appendicitis with rupture, which is published below in full.

Two new members were added to the roll.

W. H. WILEY, Secretary.

Dr. Wiley's paper was as follows:

#### APPENDICITIS; RUPTURE; GENERAL INFECTION; DEATH.

On August the 2d, I was called to attend Miss C., age twenty-four, who was suffering with intense pain in the right iliac region and vomiting incessantly. Inquiry elicited the fact that patient had been a sufferer from dysmenorrhœa for some time, with considerable pain in right groin at each menstruation. Suspecting appendicitis, but unable to establish this until ovarian or uterine disease was positively excluded, a definite diagnosis was deferred to a subsequent visit.

August 3d, pain and vomiting continued, with temperature 101 degrees F. Tumor increased to about two by four inches in diameter, the upper border of which was considerably below McBurney's point, which led me to believe it possibly only an abscess forming in the upper chain of inguinal glands. However, a subsequent visit late in the evening of the following day convinced me that it was appendicular, as the tumor had developed to such an extent, and the general symptoms of pus formation were so apparent that all else could be readily excluded.

It being then dark, I left my patient, with instructions to her parents to consider the question of surgical intervention till the early morning, when help would be summoned and the question finally decided.

I was hurriedly summoned at 2 A. M. and found my patient had had a severe chill; the abscess had ruptured and the tumor could not be detected upon examination. There was also a profuse hemorrhage from the uterus.

Drs. Williams and Robertson were called in consultation as to the advisability of operating, but the patient had rallied and was free from pain. The fever, which was 105 degrees F. but a short time before, had subsided to 101 degrees F., and the symptoms generally were seemingly so much improved that we decided to follow the expectant plan of treatment. The improved condition, however, was only the calm before the storm, as local peritonitis, with general distention of the abdomen, soon developed, carrying the patient into a moribund condition, when all hope from surgical relief soon vanished and we could but wait the end, the beginning of which was soon apparent, the patient dying at 6 P. M. of the ninth day from the beginning of the attack. Thirty minutes after death we opened the abdomen and about one quart of pus escaped. The appendix was brought into view and a laceration about one-half its length, beginning at the proximal end, was found. The privilege of a post-mortem examination of this case was allowed only for the purpose of verifying the diagnosis. Therefore we did not feel justified in searching out all of the anatomical changes caused by this accumulation of pus, but found all contiguous tissue highly inflamed and bound together by extensive adhesions.

In concluding this report let me ask: What do we learn from this case? What lessons are there in it for the general practitioner? First, when certain a case is purulent and rupture imminent, operate. Unless pus should soon pass from the bowels after a rupture, operate. If pus is soon found in the discharges from the bowels the

case may be left to nature, as the writer has done in one particular case with good results. To ignore the first law in surgery, namely, when pus is found, let it out, is bad practice in appendicular abscess, as but few cases will rupture into the bowel and drain through natural channels. Consequently, unless soon walled off, a remote possibility in time to prevent general infection, a fatal termination may be expected. The expectant plan of treatment may be best in simple catarrhal inflammation of the appendix, but when the tumor is at all perceptible it is undoubtedly distended with pus and should be drained either before or immediately after rupture.

#### CASS COUNTY MEDICAL SOCIETY.

Dr. R. D. Ramey, President.  
Dr. J. S. Triplett, Secretary.

Cass County Medical Society met in regular session at Harrisonville on September 7th, the president, Dr. R. D. Ramey, in the chair.

The principal paper of the evening was entitled "External Hemorrhoids," by Dr. H. Jerard of Pleasant Hill. This was an excellent paper full of practical points for the general practitioner. The discussion for the most part was along the lines of how this specialty may be redeemed from the quack and charlatan into whose hands a good part of it has drifted, and reclaimed by the general practitioner, where it rightly belongs. Many valuable suggestions were offered along these lines. It was the general belief that the regular physician should make greater efforts to get this work and to acquaint the public with the fact that regular

physicians are, as a general rule, qualified to do rectal work equally as well as other departments of practice.

A quiz on the "Anatomy, Physiology and Muscular Affections of the Eye," was conducted by Dr. F. B. Ellis.

For the last three months the society has been meeting monthly, but the attendance was not as good as had been hoped for, and therefore the quarterly meetings will be resumed.

The society selected Dr. H. Jerard of Pleasant Hill and Dr. J. S. Triplett of Harrisonville to prepare papers for the next meeting of the Missouri State Medical Association, these papers first to be read before the county society and be approved by it.

The society adjourned to meet at Harrisonville December 7th, at which meeting it is hoped for a full attendance. This will be the annual meeting.

J. S. TRIPLETT, Reporter.

#### GREENE COUNTY MEDICAL SOCIETY.

Dr. W. P. Patterson, President.

Dr. R. M. Cowan, Secretary.

Greene County Medical Society met in the City Hall at Springfield, September 16th, at 8 P. M., the president, Dr. Patterson, in the chair. Minutes of the last meeting were read and approved. Members present: Drs. Patterson, Tefft, Ralston, Farnsworth, Camp, Cox, Nixon, Ross, Boyd, Purseley, Barnes, Fulbright and Cowan. Visitors: Drs. Crane and Allen.

Under report of cases Dr. Farnsworth reported a patient who complained of a tickling in the throat. On examination he found a post-pharyngeal abscess. He said these

cases are rather rare. He does not remember to have seen more than three or four. Dr. Camp said the difficulty with these cases is to know where to make the incision.

Under regular order of business the subject of yellow fever was the program. Dr. Tefft, on the history of yellow fever, said there was little to be found on the subject outside of the text books. The first epidemic in this country was in Boston during the seventeenth century. Since that time there had been epidemics about every ten or fifteen years. The epidemic of 1878 was the most general. The usual boundaries for yellow fever are below the thirty-fourth degree of latitude and 1,000 feet altitude. In South America there have been epidemics in altitudes of 14,000 feet, and there have been epidemics much further north than 34 degrees, for instance in Philadelphia. He thought that by taking the two together we would get the boundaries more correctly, that is to say, no epidemics have ever occurred in places above a thousand feet in altitude that were at the same time north of the thirty-fourth degree of latitude.

Dr. Smith, who was to have discussed the "Cause and Prevention," and Dr. Bartlett, who had been appointed to discuss the symptoms, both being absent, the subject was thrown open for general discussion. Dr. Camp said he could not understand why it was that Atlanta, Ga., had no epidemics and Chattanooga, Tenn., did have, especially as the mosquito was the cause.

Dr. Tefft said that yellow fever was analogous to malaria in its propagation, that filth was a suitable midus



for its spread. The difference in the two was that cold weather stopped yellow fever and did not stop malaria. He believes the mosquito is only one of the means of spreading yellow fever. He thinks that sooner or later the theory that the mosquito is the sole distributor of the germ will be abandoned.

ROBERT M. COWAN, Secretary.

### STODDARD COUNTY MEDICAL SOCIETY.

Dr. D. R. Corbin, President.

Dr. John Ashley, Secretary.

Stoddard County Medical Society held its regular meeting at Bernie, on Wednesday evening, September 6th.

Members present were T. C. Allen, John Ashley, D. R. Corbin, John Douglas, S. M. Evans, A. D. Hill, J. L. Slayden, T. B. Turnbaugh, T. B. Wingo and Geo. W. Vernon.

The meeting was called to order by the president, D. R. Corbin, at 6:30 P. M. Minutes of last meeting were read and approved.

Dr. T. C. Allen reported a case of displacement of the heart to the right side. He thought it was congenital as there had been no previous disease of any consequence and no other pathological conditions were present.

Dr. Ashley and Dr. Corbin also reported cases of peculiarity of heart location and heart action.

Dr. A. D. Hill presented the subject of pneumonia, dwelling largely on the treatment. In the first stage he uses purgatives and diaphoretics, and in all sthenic cases he would bleed. After four to six days he uses ammonia carbonate and such other tonics and stimulants as are indicated. In opening the discussion Dr. Turn-

baugh said he had never bled, but in the first stage used aconite, veratrum or gelsemium as indicated by condition of the circulation. He also applied a glycerine jacket to the chest, and prescribes expectorants. When the temperature is down and the skin moist he gives quinine.

Dr. Allen believes in less medication and better management. He treats the patient's condition instead of the *disease name*.

Further remarks on pneumonia were made by Drs. Evans, Ashley, Douglas and Corbin.

Dr. S. M. Evans presented a paper on "Scarlet Fever" giving an admirable resume of the disease, dwelling at length on the causation and treatment.

Drs. Wingo and Vernon spoke of the isolated cases occasionally met with and the importance of being constantly on the watch for atypical cases which are frequently the fore-runners of epidemics. The subject was further discussed by Drs. Slayden, Hill, Ashley and Turnbaugh.

Dr. Wingo, chairman of the committee on medical legislation, reported that he had sent letters to every physician in the county requesting that they appear before the grand jury and give all the information possible concerning irregular practice.

After the scientific part of the program was finished the regular routine business of the society was transacted and the society then adjourned to meet at Dexter the first Wednesday in December, or thereabouts.

Following adjournment the members were invited to a nearby restaurant, where a half hour was spent

pleasantly around the banquet table, prepared at the instance of Dr. Allen, of Bernie.

These meetings are becoming very interesting from a scientific and practical standpoint, and the doctors who miss them are standing in their own light. There is also a business side to them which is worth much to every physician in the county.

We expect an unusually good program for our next meeting at Dexter, and hope to see every practitioner in the county in attendance. Come, it will do you good, physically, mentally and professionally.

GEO. W. VERNON, Reporter.

#### MONITEAU COUNTY MEDICAL COUNTY.

Dr. J. B. Stewart, President.

Dr. W. R. Patterson, Secretary.

The regular quarterly meeting of the Moniteau County Medical Society was

held in California on September 14th. In the absence of the president, the vice president, Dr. A. V. Thorpe, called the meeting to order. After reading the minutes of the last meeting and allowing bills, the application of Dr. L. L. Latham was received and referred to the board of censors.

Dr. W. Reynolds was granted permission to join the Cooper County Medical Society.

Dr. J. B. Norman lead the discussion on "The Duty of Physicians to their Neighbor Physicians and to their Society."

Dr. J. W. Marsh opened the discussion on "Chronic Diseases of the Liver." These subjects were thoroughly discussed, each member present taking some part in the discussion.

The next meeting will be held on the second Thursday in December.

W. R. PATTERSON, Reporter.

## NEWS ITEMS.

The next International Medical Congress will be held in Lisbon, April 19 to 26, 1906. It is expected that it will be one of unusual importance for a meeting which will be held in what has always been considered as an out of the way country. Already the titles of papers from some of the most distinguished men of the medical profession have been received. The meeting will be divided into sixteen sections. Dr. Ramon Guiteras is secretary of the American National Committee.

According to the *Pall Mall Gazette* the Brazilian Chamber of Commerce

has devoted the enormous sum of £400,000 as a prize to be given to the scientist who shall discover a really enduring method for the cure of cancer. An international committee is to be formed, consisting of two members of the Medical Academy in Rio Janeiro and of four eminent pathologists chosen from London, Paris and Rome. These six gentlemen will act as the jury in the case of awarding the prize. It is probable that the London journal meant milreis instead of pounds. Four hundred thousand milreis of Brazil would be about \$220,000—a tidy little sum even that for a poor doctor to get.—*Med. Rec.*

It is proposed to have the schools of Chicago visited by competent medical inspectors, with a view to ascertaining from the school children the cases of illness in their homes. When such information is obtained the household in which any member is afflicted will be visited, and efforts made to prevent the spread of the disease, and also to improve the sanitary condition. The public school teachers will be requested to report all cases of illness to the bureau, and also the addresses of all houses which they have reason to know are not sanitary. The same plan is under consideration in Kalamazoo, where some years ago a medical inspection of the schools was tried, and during its continuance over two hundred cases of infectious disease, such as scarlet fever, diphtheria, whooping-cough, and so on, were discovered in homes of school children. The work was abandoned for some cause after a few months' trial, but it is believed that it was the proper policy, and the promoters of the new plan are anxious to have the work, or something like it, begun again.—*Medical Record*.

At the next meeting of the Mississippi Valley Medical Association, to be held at Indianapolis, Ind., October 10, 11 and 12, the annual addresses will be delivered by Dr. Arthur R. Edwards, of Chicago, and Dr. W. D. Haggard, of Nashville, Tenn.

Dr. Edwards has chosen for the subject of his address, "Certain Phases of Uremia, their Diagnosis and Treatment," and Dr. Haggard will discuss in his address, "The Present Status of Surgery of the Stomach." In addition to these ad-

resses there will be the annual address of the president, Dr. Bransford Lewis, of St. Louis.

A cordial invitation is extended to every physician in the valley to attend this meeting, for which a large number of interesting and valuable papers have been promised.

On September 1, 1905, by the unanimous action of their respective boards of trustees, the Medical College of Indiana was made the Medical Department of Purdue University, with the title of Indiana Medical College, the School of Medicine of Purdue University.

The Medical College of Indiana was founded in October, 1869, and has given continuous instruction in Indianapolis for the thirty five succeeding years. It has graduated over 1,600 students, has some three score teachers and unexcelled clinical facilities.

Columbia, Mo., has been suffering from an epidemic of typhoid fever. Early in September the disease broke out and at the last report there had been a total of sixty-five cases, with one death. Among those who were sick were Walter Williams, chairman of the executive board of the University Curators, and Howard S. Reed, instructor in botany. The State Board of Health investigated the situation and found the outbreak was probably due to unsanitary conditions in certain localities, caused by defective street drainage and a large number of surface-drained outhouses, which polluted the soil and cisterns near by. The public water supply and milk supply were reported free from con-



tamination. The city officials were urged to use all possible means to put the city in perfect sanitary condition.

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The state sanitarium for cases of incipient tuberculosis will be located at Mt. Vernon, in Lawrence county. This decision was reached at a meeting of the board in St. Louis on September 3d. Other towns competing for the hospital were: Mountain Grove, Mansfield, Marshfield, Lebanon, St. James, Cuba, Salem, Bismarck and Cedar Gap. Mt. Vernon gives a site valued at \$8,500, a bonus of \$7,000, free water and light for five years, and free telephone service for fifty years.

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Frederick Stearns & Company announce a reduction in the prices of Stearns' diphtheric antitoxin. At the same time they will discontinue the system of exchanging tubes and set an expiration date of at least eighteen months. It has been found that antitoxin will remain active for this length of time. The new prices are as follows: 1000 units (immunizing) \$1.75; 2000 units, \$3.00; 3000 units, \$4.00.

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A discount of 25 per cent. is allowed physicians on these prices.

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Three druggists were arrested in St. Louis on September 6th charged with violating the new law prohibiting the sale of poisonous drugs. It was found that they were in the habit of selling cocaine, chiefly to negroes. One druggist labeled a box containing cocaine as "calomel" which he sold to a negro. It is stated that this man had a system of signs with his customers, whereby they could obtain cocaine by asking for calomel and making a certain sign with the fingers.

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While being taken from his home to the City Hospital in the city ambulance in St. Louis, on August 30th, Henry Daly was thrown to the street and dragged several feet. The team drawing the ambulance was frightened by a passing automobile and ran for half a mile or more. The patient was rendered unconscious by the fall. He was taken to the hospital in another ambulance.

## BOOK REVIEWS.

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**Therapeutics: Its Principles and Practice.** By Horatio C. Wood, M. D., LL. D. Twelfth Edition. Thoroughly Revised and Adapted to the Eighth (1905) Edition of the U. S. Pharmacopœia, by Horatio C. Wood, M. D., and Horatio C. Wood, Jr., M. D. \$5.00. Philadelphia: J. B. Lippincott Company.

This revised twelfth edition is the result of the radical alterations which have been made in the U. S. Pharmacopœia. In addition to the changes necessary to make this work correspond to the new Pharmacopœia there have been many alterations and additions. The chapters on expectorants and disinfectants have been rewritten and a new systematic classification of these drugs adopted. A detailed consideration of local anæsthesia has been added. Hyosine has been considered with the delirifacients, camphor among the cardiac stimulants, and carbolic acid with the disinfectants. The considerations on these drugs, morphine and its derivatives, alcohol, methyl-blue, xanthin basis and antitoxines are practically new. Over seventy new drugs have been added.

This treatise is for the student as well as for the practitioner. To meet the difficulties arising from this double function a typographical arrangement has been adopted by which the essentials will catch the eye of the student at once, while the subordinate matter is in smaller print, and those drugs which are of very little importance and which do not concern the student are discussed in small type.

With the revision based on the new Pharmacopœia and owing to the changes in drug strength and the number of new ones now official, this prompt appearance makes Wood doubly appreciated at this time.

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**Manual of the Disease of the Eye for Students and General Practitioners** By Charles H. May, M. D. \$2.00 William Wood & Co., New York. In this fourth edition many alterations have been made, many illustrations have been replaced by superior ones. New figures have been added, including eight colored plates, six of the latter presenting twenty-nine color drawings of external disease of the eye.

The author in this as in the former editions has presented the subject in a concise, practical and systematic manner, giving the fundamental facts of ophthalmology and covering all that is essential in this branch of medicine, making it an admirable handbook for both student and practitioner. Theories are kept in the back ground, rare conditions touched on, but the common diseases which come to every general practitioner are discussed in full. This volume is up-to-date, but has not been increased in size and is recommended as a means of supplying a foundation for further knowledge and investigation.

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**Tumors, Innocent and Malignant—Their Clinical Characters and Appropriate Treatment.** By J. Bland-Sutton, Surgeon to the Chelsea Hos-

pital for Women, Assistant Surgeon to the Middlesex Hospital, London. Third Edition, with Three Hundred and Twelve Engravings. \$4.50. Chicago, W. T. Keener & Co.

In this edition the author has described deciduoma with the sarcomata provisionally. Primary cancer of the fallopian tube is considered as a clinical entity. Myelomata and ovarian fibroids have been rescued from the banal society of the sarcomata. Additions, including observations on latent fibroids, and the malicious association of fibroids and pregnancy, have been made. The term epithelioma has been abandoned and is replaced by the phrase squamous-celled cancer. The section on echinococcus colonies has been restored.

*Ophthalmic-Neuro-Myology.* By G. C. Savage, M. D. A Study of the Normal and Abnormal Actions of the Ocular Muscles From the Brain Side of the Question. Published by the Author. Nashville, Tenn.

In setting forth the result of his study of the normal and the abnormal action of the muscles of the eye from the brain side of the question, the author has endeavored to simplify the solution of ocular muscles.

The working hypothesis is that there are eight conjugate brain centers in the cortex by means of which the several versions are effected, and one conjugate center by which convergence is caused. Each of these centers is connected with two muscles, and the work done by the center and its muscles, under guidance of volition, is normal work.

There are twelve basal centers, each connected with only one muscle. If

the eyes are emmetropic-orthophoric, these centers are forever at rest; but when there is any form of heterophoria, one of these centers must be ever active during all working hours. Under the guidance of the fusion faculty, each basal center stands ready to act on its muscle whenever there is a condition that would cause diplopia. They may be called fusion centers.

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*International Clinics*, Vol. 2, Fifteenth Series. \$2.00. Philadelphia: J. B. Lippencott Co.

This second volume of the *International Clinics* is one of the best that has been compiled. It covers a wide range of subjects, each replete in itself. It is the result of the work of some of the best clinicians in the world. It is suggestive in etiology, pathology and treatment.

The discussion of some of the rarer forms of disease is very instructive. The subjects are treated briefly but pointedly, well calculated for the busy physician. The volume will be an excellent addition to any physician's library.

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*A Manual of Organic Materia Medica and Pharmacognosy; An Introduction to the Study of the Vegetable Kingdom and the Vegetable and Animal Drugs Comprising the Botanical and Physical Characteristics, Source, Constituents, Pharmacopœial Preparations, Insects Injurious to Drugs, and Pharmacal Botany.* By Lucius E. Sayre, B. S., Ph. M., Dean of the School of Pharmacy; Professor of Materia Medica and Pharmacy in the University of Kansas; Member of the Committee of Revision of the United States Pharmacopœia. Third



Edition. Revised by William C. Stevens, Professor of Botany in the University of Kansas, with 377 Illustrations, the majority of which are from Original Drawings and Photomicrographs. \$5.00. P. Blakiston's Son & Co., Philadelphia.

The eighth revision of the United States Pharmacopœia has made it necessary to revise all pharmacognosy. In the latter branch much research work has been done in the last few years, especially in the branch of histology. The advances made in this department alone has added much to this edition. There are many illustrations from original drawings and photomicrographs. The entire field of *materia medica* has been reviewed in order to add the new drawings, the non-official which are now official, plant constituents and active principles, and to eliminate those which are no longer of service.

The chapter on organic chemicals has been rewritten and a large number of new remedies added. It has been the aim to make this work as practical as possible, only presenting those remedies which are actually prescribed and dispensed as compiled from prescriptions from leading physicians and from the orders from wholesale houses and jobbers.

The author has kept the work as concise as practical. Many of the former articles have been reduced in length so that the necessary enlargement of others should not materially increase the size of the volume. The

maximum and minimum dosage is added to instead of the average, as given by the pharmacopœia. In all but a few there has been added to the powdered drugs a description of their characteristics and microscopical elements. The chapter on powdered drugs has been rewritten, giving those things which are of interest and vital importance to student and instructor as well as the professor.

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Medical Communications of the Massachusetts Medical Society, Vol. 20, No. 1. 1905. Boston. Printed by David Clapp & Son.

This volume of Medical Communications is a wealth of valuable information and suggestions to both specialist and general practitioner. Each article is of special interest. The list of contributors includes the names of some of the best men in this country. The following are some of the contributions: The Annual Discourse: "Some Facts and Fancies About Mind and Body," by Charles A. Drew, M. D. The Shattuck Lecture: "Some Problems of Intermediary Metabolism," by Russell H. Chittenden, Ph. D.; "An Early Diagnosis of Surgical Disease in the Urinary Organs," by Benjamin Tenny, M. D.; "A Clinical and Laboratory Study of the Therapeutic Value of Hydrochloric Acid in the Diseases of the Stomach," by Richard F. Chase, M. D.; "Methods of Medicine," by Lewellys F. Barker, M. D.

# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks.	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant.	Savannah	C. O. Jeffries.	Savannah.
Atchison	G. W. Lott.	Cleboro	A. McMichael	Rockport.
Audrain	C. A. Rothwell.	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee.	Lamar	J. L. McComb.	Lamar.
Bates	A. E. Lyle.	Butler	E. N. Chastain.	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton.	Columbia	W. A. Norris.	Columbia.
Buchanan	P. I. Leonard.	St. Joseph.	Chas W Fassett.	St. Joseph.
Butler	W. A. Kendall.	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	R. K. Dodge.	Palo	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore.	Linn Creek.	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham.	Cape Girardeau.	J. K. Porterfield, Jr.	Cape Girardeau.
Carroll	W. C. Balrd	Bogard	R. F. Cook.	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Charlton	H. C. Tatum.	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris.	Winchester	A. C. Bridges.	Kahoka.
Clay	L. J. Jones.	Linden	F. H. Matthews.	Liberty.
Clinton	John Sturgis.	Perrin	E. A. Colley	Plattsburg.
Cole	J. P. North.	Jefferson City	G. Etmueller	Jefferson City.
Cooper	P. L. Hurt.	Boonville	R. S. Holman	Boonville.
Crawford	W. A. Metcalf.	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham.	Pattonsburg	M. A. Smith.	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson.	Kennett.
Franklin	H. A. Booth.	Pacific	C. Brown.	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell.	Owensville.	J. W. Nieweg	Lois.
Greene	W. P. Patterson.	Springfield	Robt. M. Cowan.	Springfield.
Grundy	N. E. Sutton.	Trenton	W. H. Winningham.	Trenton.
Harrison	A. H. Vandvert.	Bethany	W. H. Wiley	Ridgeway.
Henry	W. M. Shankland.	Clinton	F. M. Douglas.	Clinton.
Holt	C. L. Evans.	Oregon	J. F. Chandler.	Forest City.
Howard	A. W. Moore.	Fayette	C. W. Watts.	Fayette.
Howell	J. W. Bingham.	Poltersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay.	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan.	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman.	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar.	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	S. S. Brown.	Edina.	Henry J. Jurgen.	Edina.
Laclede	J. M. Billings.	Lebanon	J. A. McComb.	Lebanon.
Lafayette	P. S. Fulkerson.	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay.	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley.	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon.	Chillicothe	J. F. Cherrington.	Chillicothe.
McDonald	E. F. Doty.	Anderson	M. L. Sellers	Anderson.
Macon	W. H. Miller.	Macon	C. W. Reagan.	Macon.
Madison	G. W. Greenwood.	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier.	Hannibal	F. Janet Reid.	Hannibal.
Mercer	H. P. Cheshmore.	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman.	Uman	G. D. Walker.	Eldon.
Mississippi	A. J. Martin.	East Prairie	W. P. Howle.	Charleston.
Moniteau	J. B. Stewart.	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown.	Monroe City	M. C. McMurry.	Paris.
Montgomery	J. L. Jones.	Jonesburg	W. M. Wheeler.	High Hill.
Morgan	W. L. Hatler.	Barnett	J. T. Beale	Versailles.
Newton	J. W. Lamson.	Neosho	Horace Bowers	Neosho.
Nodaway	F. R. Anthony.	Maryville	L. E. Dean.	Maryville.
Pemiscot	D. B. Crowe.	Caruthersville	J. G. Luten	Caruthersville.
Perry	T. M. Hudson.	Perryville	F. M. Vessels.	Perryville.
Pettis	W. C. Overstreet.	Sedalia	W. J. Ferguson.	Sedalia.
Phelps	W. H. Breuer	St James	W. A. Metcalf.	Steelville.
Pike	M. O. Biggs.	Bowling Green	T. Guy Hetherlin.	Louisiana.
Platte	R. P. Davis	Woodruff	C. C. Coffey	Platte City.
Pulaski	W. L. Ragan.	Richland	G. W. Orrick.	Crocker.
Putnam	C. H. Carryer.	Hartford	T. A. Townsend.	Unionville.
Ralls	W. L. Birney	Oakwood	T. J. Downing.	New London.
Randolph	G. O. Cuppaidge.	Moberly	W. M. Dickerson.	Renick.
Ray	Chas. B. Shotwell.	Richmond	L. D. Greene.	Richmond.
Reynolds	J. M. Lowery.	Centerville	T. W. Chilton	Corridon.
Saline	D. C. Gore.	Marshall	D. F. Bell.	Marshall.
St. Charles	J. R. Mudd.	St. Charles	B. K. Stumberg.	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch.	St. Genevieve.
St. Louis	F. L. Henderson.	Century Bldg.	T. A. Hopkins.	Century Building.
St. Louis Co.	H. G. Wyer.	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones.	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander.	Memphis	O. F. Pile.	Memphis.
Shelby	H. C. Vaughn.	Shelbina	A. M. Wood.	Lentner.
Stoddard	D. R. Corbin.	Bloomfield	Jno. Ashley.	Bloomfield.
Sullivan	J. C. Kessenger.	Milan	J. S. Montgomery.	Milan.
Vernon	H. C. Jarvis.	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander.	Marthasville	E. A. Fluesmeier.	Wright City.
Washington	J. A. Eaton.	Pelgrade	W. S. Smith.	Pelgrade.
Wayne	J. P. Sebastian.	Patterson	R. J. Owens.	Mill Spring.
Worth	O. H. P. Mills.	Grant City	J. K. Phipps.	Grant City.

# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Monthly. Second Tuesday.
Cartter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday, April, July, October, January.
Daviess .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. Second Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Semi-Annual. Fourth Thursday, April and October.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Harrison .....	
Henry .....	Quarterly. Second Wednesday, Dec., March, June, Sept.
Holt .....	Quarterly. First Thursday, January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Quarterly. Second Monday, Jan., April, July, Oct.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Quarterly. Second Wednesday, Jan., April, July, Oct.
Macon .....	Monthly. Second Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Moniteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Monthly.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
St. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.
Worth .....	Monthly. Second Wednesday.



## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.

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President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

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Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, Laclede; F. A. GLASGOW, St. Louis; T. F.

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Secretary: C. M. NICHOLSON, St. Louis.

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## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, Lewis.

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Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

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# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

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## ORIGINAL ARTICLES.

### UTERINE DISPLACEMENTS.\*

By A. R. KIEFFER, M. D., St. Louis.

The subject of uterine displacements is too comprehensive to be exhaustively treated in the time allotted for this paper. Therefore, we must be brief in our reference to most features of our subject.

The whole subject is predicated upon a knowledge of the normal anatomic supports of the uterus and their several functions. These supports are divided into an upper and lower system. The upper system is composed of the broad ligaments laterally, the utero-sacral ligaments posteriorly, and the round ligaments and vesicovaginal ligament anteriorly; and, additionally, the vesico-uterine reflexion of peritoneum anteriorly, and the sacro-uterine reflexion, forming Douglas cul-de-sac, posteriorly.

The broad ligaments are formed of an extensive duplicature of peritoneum. They extend across the pelvic cavity, dividing it into an anterior

and posterior portion, and are broadly attached to the lateral walls of the pelvis. They include between their folds the uterus and its adnexa, areolar tissue and plain muscle fiber.

The utero-sacral ligaments are duplicatures of peritoneum, partially enclosing an admixture of areolar tissue with a considerable portion of plain muscle fiber. They are attached posteriorly to the middle of the lateral borders of the anterior surface of the sacrum, and anteriorly to the uterus at the line of junction of the cervix and body. They are continuous supero-externally, with the corresponding broad ligaments, and inferiorly with the peritoneum forming the cul-de-sac. The round ligaments are composed principally of plain muscle fiber histologically corresponding closely to the uterus. They spring from the upper lateral borders of the uterus, a little below and in front of the attachments of the Fallopian tubes. Each one runs outward and forward between the layers of the cor-

\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

responding broad ligament to the internal abdominal ring, along the inguinal canal, occupying its most dependent portion, through the external abdominal ring, reaching the connective tissue of the labium majus, to which it is attached, considerably reduced in size, having given off many of its fibers in its course through the inguinal canal, which are attached to surrounding structures. This arrangement makes it difficult or impossible to pull the ligament out of the canal, and an attempt to forcibly peel off these structures results in splitting off many fibers from the ligament, materially reducing it in size and strength. Very often these fibers cannot be severed and the ligament released without splitting the whole length of the anterior wall of the inguinal canal. In its course along the inguinal canal the ligament is accompanied by the genital branch of the genito-crural nerve, the anatomical relations being very intimate.

The vesico-vaginal ligament is formed of the anatomically related portions of the bladder and vaginal wall and interposed connective tissue. It thus forms a strong and useful ligament, having indirect anterior attachments to the pubic arch and a posterior attachment to the middle of the anterior surface of the cervix, the bladder layer extending up to the body, and the vaginal layer, exclusive of its mucous membrane, being firmly attached to the uterus at its point of contact.

The lower system of support comprises the levator ani and coccygi muscles, which together form the so-called pelvic diaphragm. The former muscle has its origin from the posterior surface of the body of the pubic bone

close to the median line, from the spine of the ischium and between these two points from the so-called white line, which is a thickening in the pelvic fascia along the line of its cleavage into the rectovesical and anal fascia. From this extensive origin the fibers proceed downward and backward, the most posterior fibers being attached to the lower end of the lateral border of the coccyx, the remaining fibers blending with those of the opposite side along the median line from the coccyx to the rectum, into the wall of the rectum and again along the median line to the so-called perineal body. The fibers of the heaviest part of the muscle are those attached to the rectal wall. Some of the anterior fibers in the male pass beneath the prostate gland and corresponding fibers in the female pass beneath the vagina and blend with those of the opposite side in the median line. These fibers are sometimes described as a separate muscle.

The coccygi complete the pelvic diaphragm; arising from the tip of the spine of the ischium and spreading out to form a fan-shaped muscle, they are inserted into the lower portion of the lateral border of the sacrum and the whole length of the lateral border of the coccyx.

The uterus is suspended by the upper system of supports, the broad ligaments laterally, and the uterosacral and vesico-vaginal antero-posteriorly, forming a double suspension scheme with the organ occupying the position where these lines of support cross each other. The antero-posterior line of support mentioned is attached to the lower



part of the uterus and offers little resistance to forward or backward displacements, especially backward, since the utero-sacral ligaments are attached higher than the vesico-vaginal. To correct this, and also to keep the uterus in a position to receive support from the lower system, the round ligament being attached high up on its lateral border, serves to keep the fundus forward so that the intra-abdominal pressure is received by the posterior surface of the uterus which effectively aids in preventing backward movement.

The upper system is normally able to withstand an ordinary degree of pressure from above without yielding. This is well illustrated in cases of complete perineal laceration with separation of the levator ani muscle so that the lower system of support offers little resistance to descent of the uterus. In patients who spend most of their time lounging and are not obliged to lift heavy weights or stand upon their feet, all of us have been surprised to find that the position of the uterus and adnexa was practically normal. When the pressure is great the upper system is reinforced by the muscles forming the pelvic diaphragm or lower system of support.

The vagina passes up through the pelvic diaphragm. The uterus projects into the vagina. If the axis of the uterus corresponded with the axis of the vagina the lower system of support could offer no resistance to the descent of the organ. The normal position of the uterus, however, is nearly at right angles to the vagina, which prevents it from passing through the opening between the

levator ani muscles occupied by the vagina.

Lateral deviations will be merely mentioned. They are practically always incidental to some pathological process or growth, and cannot be corrected without dealing with the causative condition.

Anterior displacements occur usually in nullipara. Anteversion may occur, but we nearly always find either an ante flexion or a combination of flexion and version. Fortunately, they seldom occasion sufficient distress to demand correction; and child-bearing, unless deferred too late in life, will effect a restoration of position. In cases of long standing and much consequent thinning of the wall of the uterus at the site of the bending on the concave side and thickening on the convex side, we may have a return of the deviation when involution is complete. In most mild cases a divulsion with or without a curettment, will give relief from the symptoms for which we are consulted.

Retro-displacements are the deviations most frequently found. Retroversion may or may not be complicated with flexion. A high degree of flexion is seldom found except in multipara; as the surgical indications are not modified as a rule by a co-existing flexion, we will not enter into a discussion of the pathology of flexion. Retroversions are usually classified as those of the first or minor degree when the fundus uteri points toward the promontory of the sacrum; of the second or medium degree when the fundus points toward the hollow of the sacrum; and the third or extreme degree when it points toward the tip of the coccyx. All intermediate de-

grees are met with. It is almost unnecessary to add that a case of retro-deviation of the first or second degree, given sufficient time, will ultimately become one of the third degree. As soon as the anterior surface of uterus receives the force of the intra-abdominal pressure it is only a question of time when the extreme degree will be reached.

Retrodeviations for practical purposes may be classified as those complicated by adhesions, with or without pathological conditions of some of the adnexa; and those in which there are no adhesions or other pathological conditions requiring surgical attention. The latter class is naturally divisible into two subclasses, in one of which the uterus is in the state of subinvolution, and another in which the factor of subinvolution does not exist.

Retrodeviation with adhesions or other pathological conditions requiring attention, cannot be dealt with without opening the peritoneal cavity. This is done in the median line, through the vagina, or by going beneath the lower border of the internal oblique and transversalis muscles after separating the fibers of the aponeurosis of the external oblique as recommended by Goldspohn, and called by him an extended Alexander operation. Of these methods the central incision has much to recommend it, in my judgment.

After dealing with the adhesions, *eter*, we have the choice of two operations for correcting the position of the uterus, namely, ventrofixation or suspension, and shortening the round ligaments according to Gilliam's method.

The technique of ventrofixation is well understood, as given in all recent text books on gynecology, and need not occupy our time here. After the child-bearing period it is a good operation. During the fruitful period it has some serious objections.

Gilliam's plan has much to recommend it. The nearer the round ligaments are made to draw upon the uterus in their natural line the better. This might be done by drawing them through the wall lower down than as described by Gilliam. His plan is as follows:

A suture is passed under the round ligament one and one-half inches in front of the uterus on each side. The edge of the muscular portion of the incision is held firmly while the superficial structures are retracted. A sharp-pointed forceps is pushed slantingly through the wall, commencing one-half inch from the incision and one and one-half inches above the pubic arch, emerging one inch from the incision. The ligature around the ligament is pulled through the abdominal wall, and with it a loop of the ligament. The loop is pulled a short distance above the aponeurosis and secured. His method, if I understand it, does not include any part of the ligament in the suture, the same being held by suturing the tissues between the limbs of the loop. This operation has not yet stood the test of time, but has much to recommend it. It is certainly the best intraperitoneal method of shortening the ligaments thus far coming to my notice.

Intraperitoneal shortening of the round ligaments through the vaginal incision is very unsatisfactory. The only circumstance that recommends it



in the least is the absence of visible scar. This is minimized by the fact that scars in extra-pelvic methods need not be large and are partly or wholly covered with hair. The objections are, greater danger to the patient, the danger of adhesions, the using of the strongest part of the ligament for loops and the weakest part to stand the strain of holding the uterus in position. Statistics show more failures and complications during subsequent pregnancies. This forms a formidable array of objections to which a patient should not be subjected for merely esthetic reasons.

Extra-pelvic shortening is devoid of danger. Adhesions cannot occur; recurrences are less common than in any other schemes for correcting a retro-deviation of the uterus.

The wisdom of making the existence or non-existence of subinvolution a basis for subdivision of the class of retrodisplacements without adhesions, becomes apparent when we come to study any given case for the purpose of correction. We have seen that plain muscle fiber forms the round ligaments and enters largely into the formation of the utero-sacral ligaments and is more or less intermixed with the areolar tissue between the walls of the broad ligament. When subinvolution of the uterus is present a corresponding degree of subinvolution exists in all ligaments of the organ which contain plain muscle fiber. Subinvolution of the uterus increases its weight and adds to the difficulty of keeping it in position. Subinvolution of the ligaments relaxes them and lessens their ability to support the uterus, and displacement results. The common-

est cause of such a state of subinvolution is laceration of the cervix. The indication in such a case is to repair the cervix and perineum, or lower system of supports; if necessary, replace the uterus and keep it in position with a pessary until involution is complete. If subinvolution is due to some other cause it should be treated while the uterus is supported. A certain degree of descent of the uterus is a factor in such a case because of the relaxations of the utero-sacral ligaments. The pessary takes off the strain on these ligaments and permits them to shorten during the process of involution. Occasionally such a case as has just been described will be cured without further operative procedure. Should the resultant changes in the uterus and ligaments fail to restore the position of the uterus after three months trial, the case then falls into the sub-class of retrodeviation in which subinvolution is not a factor. These cases are nearly always found in the nullipara. The lower system of supports, or pelvic diaphragm, in these cases are intact. The uterus is usually more or less undeveloped. There is a general laxness of the structures forming the upper system of support with the exception of the vesico-vaginal ligament. As might be guessed, this degree of laxness affects the ligaments in a ratio of their correspondence to the uterus in structure. The round ligaments being practically identical histologically are extremely lax. Since the attachments of all the other ligaments forming the upper system of uterine supports are low down on the uterus, except the broad and round ligaments, and the ar-



rangement of the structures forming the broad ligaments is such that those portions having low attachments only really support the organ, there is little save the integrity of the round ligaments to prevent a retro-displacement in an otherwise normal pelvis. When these are elongated the uterus is always retroverted.

This furnishes a clear indication as to the proper surgical procedure to correct a retro-displacement belonging to this sub-class. To repeat, then: In a case of retro-deviation without adhesions or other pathological conditions of the uterus or adnexa requiring surgery, with the pelvic diaphragm or lower system of uterine support in a state of integrity, the indication is clearly for shortening the round ligaments. Such a case does not require an abdominal incision to deal with adhesions or diseased adnexa. The pelvis is left in a normal state. Complications never occur in subsequent pregnancies. The condition of these patients usually does not warrant a hazardous operation. The condition in itself is not hazardous. No matter how perfect our technique, opening the peritoneal cavity is accompanied by some risk, besides the operation can be better done extraperitoneally. The only points of difference in the recommendations of different operators for extra-pelvic shortening relate to the methods of finding the ligaments and fastening them. They can be found at the external abdominal ring or near the inner end of the inguinal canal a little internal to the internal abdominal ring. The advantages of picking up the ligament at the external ring are merely that one not thoroughly

conversant with the anatomy of the inguinal canal can more easily find it here. The disadvantages are that it is difficult in most cases to pull it out sufficiently to control the position of the uterus without dividing the anterior wall of the canal. The ligament gives off fibers for attachment along the canal. It is smaller at the external ring than at the internal ring. Unless you open up the inguinal canal you are liable to split off many of the fibers of attachment and weaken the ligament and run a risk of breaking it before you get it fully loosened. This would be an embarrassing accident. Further, dissecting it out of the canal would increase the danger of post-operative hernia. Once you are sufficiently familiar with the anatomy of the canal you can find it more easily just inside the internal ring and obviate all these objections. Kellogg's method with slight modification recommends itself to me. It is done as follows: Locate the internal ring by locating the femoral artery where it passes out from under Poupert's ligament. Poupert's ligament can be easily felt in all but extremely obese subjects. The internal ring is one-half inch above Poupert's ligament and in the line of the femoral artery. Make a short incision one-half inch above the parallel to Poupert's ligament, its outer end extending just beyond the internal ring. Separate all the fasciæ down to the white glistening aponeurosis of the external oblique muscle. In thin subjects an incision one inch in length is sufficient. With small retractors the incision can be moved freely and made to expose the aponeurosis over quite an area. Having controlled all

bleeding, separate the fibers of the aponeurosis with the point of a knife about one-fourth of an inch above Poupart's ligament and half an inch inside of the internal ring. The opening in the aponeurosis need not be over half an inch in length. Kellogg recommends a verticle incision, cutting the fibers in the aponeurosis. Such an incision readily frays out at the edges and does not close satisfactorily. With a hook not too sharp, as it must be remembered that the *vene commites* of the deep epigastric artery as well as the artery itself are near at hand, you search for the ligament by keeping the point of your hook first against the inner surface of the anterior wall of the canal, then the floor, and finally the outer surface, of the inner wall before withdrawing the hook. This makes it include the contents of the canal. You will likely secure the ligament at the first trial. If you do not, seize with a hemostat the fascia you draw out and repeat the manœuvre. If you do not get it at second trial you are probably searching for it too far away from the median line of the body. Try a little farther from the internal ring. When you bring it up, have an assistant hold the hook while you separate it from the fascia and the genital branch of the genito-crural nerve. When you have the ligament thus cleared you will find that gentle traction draws it out of the pelvic cavity. The peritoneum soon appears intimately related to it and partially surrounding it. This readily peels off. If you are wearing gloves use your thumb nail for peeling it off; if not, then use gauze or a blunt instrument. I would not risk infection by using the naked

nail, no matter how carefully you have cleansed your hands. It is usually necessary to draw out four to six or more inches. When your assistant announces that traction upon the ligaments properly controls the fundus of the uterus you may cover up your incision and repeat the steps of the operation on the opposite side. If your assistant can determine that the uterus is in the median line you may fasten the ligament before proceeding to the opposite side. This is an important step in the operation. The ligament is usually much larger when enough has been drawn out. In fact, experience will teach you that by the appearance of the ligament you can nearly tell when you have enough of the ligament drawn out. The contents of the inguinal canal have not been disturbed and you have a loop of ligament retaining all its original attachments to deal with. Its nutrient artery courses along the center. This must not be included in your suture for obvious reasons. With a short full-curved needle loaded with twenty-day chromicised catgut you catch a little of the edge of the opening in the aponeurosis of the external oblique muscle about one-third of the thickness of the upper limb of the loop of ligament, then the lower edge of the ligament. This is immediately tied and cut off. Then have your incision in the superficial structures pulled well upward and inward. Then with an artery needle, with a point a little sharper than as ordinarily used, puncture the aponeurosis of the external oblique muscle about an inch and a half upward and a little inward from the opening you have just closed. Carry the point of the needle just



beneath the aponeurosis in the direction of the first opening and bring it out about half an inch from said opening. Pass a small tape through the loop of ligament and thread both ends together through the eye of the needle. Then withdraw the needle, carrying the tape into the nearest opening and out of the upper one. See that the tape is at the extreme end of the loop and not twisted where it is in contact with the ligament. The ligament must not be bruised. Gently draw the ligament through these openings with the tape. Do not use force. If it does not pass with gentle traction enlarge the openings with the point of a knife. After drawing it through barely taut pick up the edges of the lower opening and a little of the ligament as in dealing with the first opening. Fasten it again at opening where it emerges in like manner. Only fasten the limb of the loop which is attached to the uterus. Anchor the remainder of the loop to the aponeurosis as far away as your incision through the parts will permit. Do not have much tension in the ligaments anywhere. The superficial incision may be closed to suit the notion of the operator.

Unusual care should be taken to prevent suppuration. Have the preparation of the field for operation extend at least one third down the thighs. Cover external genitalia with a moist pad between the thighs during operation. After the operation have your dressing extend down the thighs, and hold it securely in position with a strip of adhesive plaster running around the thigh. The patient should be kept very quiet one week. Then she may be lifted to an easy chair for

rest. Keep her reasonably quiet the second week. Would recommend using a pessary three months if uterus is heavy; if small, two months. If patient is a nullipara, and gives history of dysmenorrhœa, dilate the cervix at time of operation before shortening the ligament. Curette, if necessary, but be very sure it is necessary. With such care suppuration should not occur. Should it occur, it is certain to spoil the result of your work if left to run its course. At first indication of such untoward result remove sutures from the superficial incision and give frequent and prolonged irrigations of the wound with a 3½ per cent. boracic acid solution. You may save the ligament. In such a case you would necessarily require your patient to remain quiet and recumbent till the wound heals. In one of my patients, suppuration was unaccompanied by fever, and not suspected till so far advanced as to spoil the ligament. This was the result of faulty preparation of the patient.

Nothing in my practice has given a greater degree of mutual satisfaction than my recent cases of Alexander operation.

#### DISCUSSION.

Dr. W. T. Elam, St. Joseph: Displacement of the uterus is a subject which has engaged attention for many years. It is not the displacement that causes the trouble, but the condition that brings about the displacement, and the displacement aggravates the pre-existing trouble. The cause is usually subinvolution. The collar of connective tissue which surrounds the cervix offers in itself decided support. Laceration of the cervix produces an



inflammation causing contraction of the utero-sacral ligament or the utero-vesical ligaments. To illustrate my statement that the displacement in itself does not cause the trouble, I have a patient with a retro-displacement, but she is the picture of health, and goes about her duties. The only symptom she has had is leucorrhœa and some little menorrhagic disturbance. I believe, as a rule, where the round ligament is stretched it becomes functionally inactive, and any shortening of the ligament, unless the existing cause is removed, will give little or no relief. Many have to have the displacement corrected by some other means after the Alexander operation. Such depleting measures as the use of boroglyceride or scarification of the cervix will sometimes do much to relieve the condition.

Dr. Frank Glasgow, St. Louis: I rise to call attention to some things I consider of importance. All writers have admitted the effect of laceration on the descent of the uterus, but there is something they have not taken into consideration, and that is the condition of the muscular fibers supporting the uterus. That was impressed on me very strongly some years ago in a case where there was no laceration. The woman was a virgin, and, though there was no laceration, the uterus was outside of the body. You could explain this only on the condition of the muscles. I also saw a case in an infant ten days old. In this case, too, the uterus was outside the body; there was a spina bifida and a paralysis, I suppose, of all the muscles of the pelvis, hence the muscles would not support it. Now, as to these cases. In one the woman was

run down in health; she was a nurse and had lifted an old lady much. In the child, there was absolute paralysis. You see this state of things in a minor degree in many cases, and these are the cases that are cured by pessaries. We find them in young girls. You can replace the uterus, put in the pessary, and in a month or two the probabilities are the woman will be all right. These cases are cured by pessaries; they are sometimes cured merely by replacement. We all know we must repair the part that is torn, but this looking after the condition of the muscles, the necessity for toning them up, is not recognized. The case of the infant was unique to me. I never heard of but one case, and that one Dr. Dorsett told me he had read of and had saved the clipping.

Dr. Kieffer, in closing: I apologize for the incompleteness of the paper, but I would like to have the members consider what I have said. The most important points were overlooked in the discussion. Shortening the round ligaments will relieve the leucorrhœa and menorrhagic disturbance in the case mentioned by Dr. Elam. We have two separate and distinct systems of support, the upper and the lower system, and with the levator ani muscles not intact you will always have a descent of the uterus. Yet we have seen cases where there was complete laceration of the perineum, but still found the uterus in pretty good shape, the levator ani muscles not being separated. Hirst, who has a large experience as an obstetrician as well as gynecologist, says his best results were secured from shortening the round ligament. He scores all fixation schemes in the

pelvis. Ventro-fixation and the Alexander operation are the only ones he recommends. I have attempted to define clearly in this paper the class of patients wherein the operation is

indicated. When the lower system of supports is intact and you have an elongation of the ligaments, shortening of the round ligament gives excellent results.

## THE ABDOMINAL VS. THE VAGINAL ROUTE IN PELVIC SURGERY.\*

BY C. LESTER HALL, M. D., Kansas City.

The solution of this question may never be reached, since the advocates of each route are largely influenced in their opinions by the view point of personal experience.

The surgeon of large experience by the vaginal route must of necessity lean toward that method, and, though he may be quite as capable as the average surgeon in the abdominal route, his familiarity with vaginal work and acquired dexterity by this method must make him a partisan to that route. The converse is true of him who has almost wholly employed abdominal celiotomy in dealing with pelvic conditions. Thus, surgeons are wedded to that method with which they are most familiar, and with which experience has made them more dexterous. Aside from this axiomatic concession, it should be possible to discuss the question upon a broader basis with the presentation of the merits of each route.

Avoidance of ruts in operative work is quite as essential as avoidance of routine therapeutics. The physician who treats his patients with a set of stock prescriptions may be a success-

ful practitioner, but he fails to attain that higher standing in his profession that is possible with one who not only critically differentiates conditions, but constructs his treatment on scientific and rational bases.

I suppose it is accepted by all abdominal and pelvic surgeons that the route of choice is by the vagina in pelvic accumulations which have gravitated into Douglas' cul-de-sac, where free drainage can be established without entering the peritoneal cavity.

This may also apply to a condition of prolapsed appendages without adhesions, where, for cosmetic reasons, it may be desirable to avoid an abdominal scar and the possibility of a subsequent ventral hernia. Neither of these considerations are tenable in the practice of one who employs modern technique. But it is in those inflammatory conditions involving the periuterine tissues, tubes and ovaries with adhesions high in the pelvic cavity—where the palpating hand can scarcely reach the inflammatory mass—that discussion has arisen as to the best method to be employed.

It is contended by the advocates of the vaginal route that the peritoneal cavity can be entered from below,

\* Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

either by anterior or posterior colpotomy; that adhesions can be broken up—relying upon the sense of touch—or through an enlarged vaginal incision the mass of adherent tubes, ovaries, fundus of the uterus, intestines, mesentery and omentum, can be brought into view and broken up—rents and tears repaired, and returned into the cavity quite as readily as by the abdominal route. Without taking the time to mention the names of workers who set up these claims—and many stand high in the profession—it is difficult to conceive how it is possible.

To those who open the abdomen by a liberal incision and attack pathologic conditions under the direct guidance of the eye and meet with almost insurmountable difficulties, the claim of those who say that the same can be accomplished by the vaginal route seem extravagant.

The traction necessary to bring about the displacement of the pelvic viscera and liberate adhesions which are often dense, is so great that dangerous ruptures result which often evade detection when the work is done by the vaginal route. Even when done through the open abdomen, with most painstaking care, these accidents are perplexing and often difficult to remedy.

Modern technique demands the most careful covering up of abraded and cut surfaces, to prevent subsequent adhesions, which are the *bête noir* of pelvic and abdominal surgery. This is quite impossible by the vaginal route.

Granting that vaginal drainage is the most direct and therefore the best

where drainage is necessary, it may justly be claimed that in the very nature of things the vagina is the most difficult to clean, the rectum excepted, of any operating field.

To scrub the vaginal mucous membrane with brush and germicide, means the destruction of nature's protective wall and leaves avenues for the entrance of infecting germs. To use bland agents in the preparation of the vagina for operative work, means that the canal is not rendered sterile. To bring down into such a field the appendages for resection and repair and then restore them to the cavity, entails risk of infection.

Among the difficulties encountered in operating through the vagina may be mentioned the contracted or senile vagina. This contraction is not confined to the vulva or lower segment of the canal, but is often found in the upper third. Since pathologic conditions, demanding surgical intervention, frequently occur at an age at which we expect atrophic and senile changes, this narrowing of the vagina is to be expected as a complicating condition.

The difficulties in controlling hemorrhage with any degree of certainty by the vaginal route, are not encountered by abdominal section where we can, with visual aid, locate and secure vessels before division, or readily and accurately ligate them after they are cut.

Vaginal hysterectomy implies a pan-hysterectomy, in which the keystone of the arch of the vagina is removed which, in the opinion of the writer, should not be done except for malignant disease. In abdominal hys-



terectomy the cervix is left and the integrity of the vagina is not disturbed.

Of the two vaginal routes, for conservative or radical work upon the appendages, viz.: anterior and posterior colpotomy, the latter is greatly to be preferred where drainage is necessary. Where anterior colpotomy is done, the cul-de-sac, being lower than the separated bladder and uterus, acts as a closed receptacle for any fluid which escapes into the abdomen, and if this fluid be infectious we may expect local if not general peritonitis. Anterior colpotomy for the correction of retro-displacements by vaginal fixation has not had the sanction of operators to a great extent. Granting that adhesions can be broken up by this route, the extreme anterior fixation—which is necessary to successful results—establishes such new anatomical relations, that not only is the comfort of the patient endangered but maternity is jeopardized. These backward displacements with adhesions can be more anatomically and certainly corrected by the abdominal route in the employment of some of the methods of shortening the round ligament, preferably that of Montgomery, of Philadelphia.

So might various conditions be specified and reasons assigned for the employment of the abdominal in preference to the vaginal route, but a brief recapitulation will suffice to establish the superiority of the abdominal route:

(1) Except for pelvic accumulations presenting low down upon the vault of the vagina, the abdominal route possess every advantage. (2)

The abdominal method offers the advantage of the employment of the eye to aid the work of the hand, thus not only avoiding mishaps but affording opportunity for correcting them when they do occur. (3) With approved technique the abdomen can be opened above with less danger of infection than by the vaginal route, with more certain control of hemorrhage and accurate removal or repair of diseased organs. (4) The contracted or senile vagina, occurring so often coincidentally with pathologic changes in the pelvic cavity, with fixation of the uterus, presents difficulties which have to be experienced to be fully appreciated.

#### DISCUSSION.

Dr. W. T. Elam, St. Joseph: The route of operation upon any deeply situated organ must depend upon the familiarity of the individual with the organ, its function and the route or routes by which it may be reached. The man who is familiar with a certain route, having performed operations through one route, the vaginal, for instance, is a better operator by that route. Either route will suffice, but in the majority of instances, except hysterectomy, the vaginal route is not as dangerous as the abdominal. If you have accumulations in the cul-de-sac or pus in the layers of the broad ligament, they can be more easily and satisfactorily and safely reached through the vaginal route, and it is not so grave an operation as opening the abdomen. I take the position that under ordinary circumstances, where the purulent accumulations can be accurately determined, opening through the vaginal route is the best. While it may not give that

satisfaction obtained where the opening is made above, it does give a symptomatic cure almost as satisfactory. As to the removal of the uterus, vaginal hysterectomy is not satisfactory. It lays the patient open to the danger of hemorrhage and increases the danger of mortality. It has not appealed to me sufficiently to get me into very deep water. In one of my cases the cellular and pelvic tissue throughout was involved, the organ itself involved and multiple abscesses found in its walls. The patient had been sick some time and it was not found possible to perform either vaginal or abdominal hysterectomy without endangering the patient's life. I did the operation in two successive steps. I made an incision around the os, went up into the abdominal cavity posteriorly between the rectum and uterus through Douglas's cul-de-sac, then out between the layers of the broad ligament, evacuated pockets of pus and left the uterus in situ, held there by the apex of the broad and round ligaments. Around the body I packed gauze and sent the patient to bed. Seven days thereafter I opened the abdomen, found practically no pus, removed this great, big septic uterus and the patient got well.

Dr. O. B. Campbell, St. Joseph: I think Dr. Hall's paper will, in general, meet the approval of American operators. In America the abdominal route is generally preferred, but while this is true, it is equally true, as Dr. Elam has stated, that the choice of methods depends upon the familiarity of the operator with the route chosen. In the clinics of Europe a great deal of work is done through the vaginal route and the mortality

reports compare with the reports from work done in this country through the abdominal route. But progress continues, new operations are being brought out, and, in considering this subject today, we should go into detail as regards conditions when we attempt to make a choice of routes. The question is, are we to do with complete work or incomplete work? Are we to adopt a mere life-saving operation, leaving the patient with a retro-deviated uterus, breaking up as few adhesions as possible? To draw the uterus down and out requires as much manipulation as the operation through the suprapubic route. Now, we are not sure of the control of hemorrhage in the vaginal work. I have done a good many operations through the anterior vaginal incisions and I have had difficulty in controlling the hemorrhage, and when, after loosening up adhesions, I have found it necessary to remove the appendages, I have felt very uncertain of my results in the control of hemorrhage. I saw one of the greatest surgeons in Europe operate on an old inflammatory case, with a posterior deviation, in which there was no pus; he turned the uterus down through an anterior incision, and that patient died from hemorrhage five minutes after she was taken off the table though fifty ligatures had been taken.

Dr. Katherine B. Richardson, Kansas City: I am not permitted to see gentlemen operate very often, and am in the position of ministers who fall from grace because they never hear anybody preach. But I remember seeing two gentlemen become very angry because they could not agree on which side the fetal heartbeat could



be heard. The subsequent birth proved that there were twins. Now it seems to me, from my limited view, that there are certain cases where it would be preposterous to go in through any other route than the vaginal, while in other cases it would be equally preposterous to attempt a vaginal operation. As to the objection that if you begin the operation through the vaginal route you may have to go through the abdominal route, why is it such a serious thing to begin an operation by the vaginal route and then finish it through the abdomen? I think the women surgeons will more often prefer the vaginal route to the abdominal, and this is where they have a little advantage over their brothers on account of the size of their hands. I have a case where the uterus is hanging almost entirely out of the vagina and there are scarcely any adhesions. How could any one say that patient should be operated on through the abdomen. I have another in which the uterus is very high up and very septic. How could any one say that patient should be operated on through the vagina? We are all inclined to think that the way with which we are most familiar is the best.

Dr. Frank Glasgow, St. Louis: I used to be more of an advocate of the vaginal route than I am now. For some years I felt it was open to discussion because the vaginal route was less fatal; now that is not true, and I now confirm every word that Dr. Dorsett has said. I, too, limit its use to removal of pus in the cul-de-sac. I am accustomed to operating more by the sense of touch than many surgeons and consequently I might prefer the

vaginal route, but I see less and less use for it. As to hemorrhage, I had one case where the ligature slipped. One speaker has spoken about going in above to ligate the bleeding vessel. You cannot do this in time to save your patient. In my case I only saved the patient by making a dumb-bell pack the size of a child's head, I would have lost that patient if I had not done that. The vaginal route is only fit for removing small uterine tumors and for opening collections of pus low down in the pelvis.

Dr. Thomas J. Beattie, Kansas City: The subject to me is a very timely one. Dr. Dorsett says this subject has been discussed at four or five annual meetings, and I think if we would discuss it more frequently than we have done, we would be better off. There is a field for more frequent entering of the pelvic cavity through the vagina than has been done in the past. There are many troubles that can be relieved through the vaginal route. The vaginal route is certainly the best route so far as shock is concerned, drainage, or in any condition, inflammatory or otherwise, that you can reach through the vagina. More work is not done through the vagina because operators do not know how to do it. I am surprised that Dr. Campbell would stay in an operating room and see an operation under such conditions as he describes. There should be no such hemorrhage as the work is done today. You have the whole field before you. It is a simple thing to prevent such a hemorrhage. With two ligatures you can have absolute control of any hemorrhage that may occur around the uterus. It requires much



more skill to do work through the vagina, and I am doing most of my work through the abdomen; but I believe that through the pelvis we can resect the ovaries, loosen adhesions, remove fibroids of reasonable size, and do many operations that are being done through the abdomen. The best route for fixation of the uterus for support is through the abdomen.

Dr. L. J. Dandurant, St. Joseph: I agree most thoroughly with Dr. Dorsett and the others who state that they have eliminated the vaginal route for all except a very few cases. The intention of the essayist, I think, was to bring out the merits of both routes, and the points of discrimination for the selection of either. It all boils down to two conditions: When we have an inflammatory mass up in the pelvis we cannot always tell what is involved in that mass, and a man is taking chances when he goes through the vagina. On the other hand, when we can see perfectly what we are doing, it is the best procedure in order to remove the diseased condition. It is more a matter of ability to diagnose the condition rather than of dexterity in the operation itself. Possible injury to the bowel and to the bladder should be taken into consideration. One can ligate very nicely, as the two speakers preceding me have advocated, if the vessels occupy their normal position as described by Gray, and have not been distorted by the pathological mass. However, it is not such an easy matter in reality to ligate those vessels and obviate the dangers. The most important point, as Dr. Hall says, is the danger of sepsis. It is next to impossible to make the vagina abso-

lutely sterile. It is a difficult matter to secure a sterile condition even where we can use a brush and soap; but here, where we cannot employ such means and must go in where there is infectious material, there is great liability that an infection may be set up and the death of the patient be the result.

Dr. A. H. Cordier, Kansas City: While I agree with Dr. Dorsett and Dr. Hall I want to call attention to the method of determining which of these operations we should do. I prefer the abdominal operation except in cases of malignancy and disease of the cervix itself. But suppose a patient presents herself with a history of recent abortion or recent confinement. This patient previously was perfectly well. She develops the usual septic symptoms, temperature running 104° to 105°, high pulse rate, and you find an inflammatory condition indicating that it has gone on to suppuration. It would be foolish to go in through the abdomen. You have an acute infection and by opening the abdomen you would open a clean peritoneum and might infect your patient with a fatal result. Again, these patients will not withstand a severe operation. You must select the operation that will be quickest and attended by the least amount of shock. Many of these cases have been treated by the trochar or the aspirator and these cases get well after draining off the pus. Such cases almost invariably get well from the vaginal incision. But don't disturb the adhesions. Take another case of chronic invalidism, repeated office visits, applications of tincture of iodine two or three times a week, all indicating a chronic con-

dition of the ovaries and tubes. Let one of these patients get an acute attack. You have here a condition in the pelvis that will continue regardless of palliative measures. The condition is not as virulent and the patient is more or less immunized. In such cases there will be enormous pockets of pus. If you go in the vagina and puncture the pockets of pus and put in a drainage tube your patient will generally improve. In such cases you should go in from above and remove the entire diseased structure. Vaginal operations for infectious conditions should not always be condemned.

Dr. St. Elmo Sanders, Kansas City: Regarding the blood supply of the uterus, the ovarian artery as it courses along the top of the broad ligament gives off a few large branches and the uterine artery gives off few branches until closely approaching the uterus. Occasionally at a point about midway between the uterus and pelvic wall there is a large branch given off from the ovarian artery which anastomoses with the artery to the round ligament and with a branch from the uterine artery. In these cases the two ligatures will not control the hemorrhage which comes from these two large branches. I have

seen this in several cases. I have sometimes seen it in removing the ovaries and tubes. How often it occurs I do not know, but in every fifth or sixth case, I think. As to shock, if you want to avoid shock you will have to avoid making traction on the mesentery. If we go in above, we make traction on the mesentery and if we go in below we make less of a pull on the mesentery and we have less shock because we are operating near the peripheral nerves. In regard to shock under anesthesia, why not use sterile water? I have just come from a successful laparotomy with sterile water. It was a case of tubercular peritonitis. The man lay there and talked to me all the time and said he felt no pain except when we made traction on the mesentery.

Dr. Hall, in closing: I thank the association for the reception which has been given my paper and the gentlemen who have so liberally endorsed my position. We all agree that where there is pus in the cavity drainage through the vagina is right. We all believe that hemorrhage can be most thoroughly controlled from above, and we all agree that the vagina cannot be cleaned for operation. I think the position I have taken is correct and I am glad to have you endorse it.

## ABORTION FOLLOWED BY THROMBO-PHLEBITIS AND EMBOLIC PNEUMONIA.\*

BY FRANCIS REDER, M. D., St. Louis.

An abnormal rotundity of the abdomen in an unmarried woman of thirty-two years, where an exhaustive examination led up to a culpable inference as to the cause of this enlargement, is directly responsible for the complications that followed the introductory steps for the relief of the existing condition.

I have been convinced on several occasions that a differential diagnosis between pregnancy and an abdominal enlargement from other causes is sometimes an exceedingly difficult matter. Especially is this true when the more reliable signs of pregnancy are not yet developed, or are clouded, and where there is a willful antagonism on the part of the woman toward the efforts of the physician to arrive at a definite conclusion.

After an exhaustive inquiry into the patient's history and a thorough examination, a diagnosis of fibromyoma was made. Appreciating the fact that the pregnant uterus is by far the most common abdominal tumor, the satisfaction gleaned from abdominal palpation, inspection, auscultation and a combined examination, gave me the assurance of a correct diagnosis.

The history of the patient was briefly this: Menstruation always irregular, a cessation of from two to five months being not infrequent. In the year 1904 she menstruated in February, again in May and August.

\* Read before the St. Louis Gynecological and Obstetrical Society, October 12, 1905.

That was the last menstruation (I saw the patient November 29th). Her menses were free from pain, quite profuse, and the duration from five to seven days. About the middle of August she noticed a fullness in the lower part of her abdomen, and also noticed that this fullness increased quite rapidly. She consulted her family physician, who, after observing her condition for two months, pronounced this fullness to be a tumor and advised immediate removal.

The patient has always been in good health, and the appearance of the tumor did not influence her state of health in any appreciable manner. Her appetite was always good. There never was any nausea. The renal function was the same now as it has been in the past. Her breasts were at no time painful except during menstruation. They did not appear to her to have increased in size; there was no increase in salivation. She has had a leucorrhea for years, to which she paid no attention. A direct question as to coitus was met with a stern and flat denial. Here I may state that her family physician, who was present during the examination, informed me that it was hardly necessary to ask such a question, as Miss A. was a most estimable woman and devoted to her church. When the doctor championed his patient's cause with these words he caused me to dismiss from my mind the only sign that gave me any concern about my diagnosis. This sign was the pe-



culiar, I may say characteristic, condition of the cervix.

The findings revealed by the examination proved to demonstrate nothing that could directly favor pregnancy. There was a swelling symmetrical in contour, round, and readily palpable, extending a little above the umbilical line. The swelling was hard, and gave a uniform distension to the abdomen. Percussion note was dull; auscultation elicited no fetal heart sound and no bruit.

Vaginal examination revealed the cervix swollen, soft and very moist, permitting the introduction of the examining finger through the external os without difficulty. The cul-de-sac was filled with a uniform mass that felt smooth, hard, yet elastic.

The breasts were fairly well developed, with buried nipples. Montgomery's tubercles could be seen; they were, however, not prominent. The woman was a brunette, which in itself would cause the areola to be strongly pigmented.

Specific gravity of the urine 1.018, no albumin, quantity about sixty ounces in twenty-four hours. Upon standing no "kyestinic pellicle" developed.

From these findings I was not able to demonstrate to myself anything else about this condition excepting that I was confronted with a fibromyoma of the uterus.

The patient was very anxious to be relieved of the tumor. In telling her how such a removal was effected, I emphasized the danger of the operation in the hope that perhaps a latent disclosure might be made by the patient. Her willingness to be oper-

ated on, however, was such that I relieved myself of any further doubt as to the correctness of my diagnosis.

November 29th she entered the hospital. On December 2d I made an abdominal section. I encountered no obstacle in entering the abdominal cavity and found the tumor without difficulty. My suspicion was immediately aroused by its shape and color. The shape was round and smooth, the color that of a ripe eggplant. In lifting the tumor out of its bed I was able to deliver it with ease. I was now able to recognize my error by what I could feel in the uterine cavity, the head and body of the fetus.

•The uterus was returned to the abdominal cavity, with as little handling as was possible, and the wound closed.

On December 4th the uterine contents were expelled after the woman had been in pain for about eight hours. The fetus showed the development of the fifth month.

Up to December 9th the patient's condition was that of a normal puerperium. On that day, at 8:30, a temperature of 100.4 deg. F. and pulse 92 were registered. The pulse was irregular; local symptoms of any septic inflammation were wanting.

Up to December 18th the temperature and pulse rate fluctuated but slightly. Patient refused nourishment, complained of nausea, vomiting often. December 19, at 6 P. M., temperature 101, pulse 120, abdomen tympanitic and very painful, especially over the uterus and left iliac region. Left inguinal region and left thigh were swollen and very

painful. Patient very restless, unable to sleep, showing great physical depression.

On December 23d a similar condition of thrombotic phlegmonism manifested itself in the right leg. The attack proved more severe than the phlegmon of the left leg, undoubtedly due to the debilitated condition of the patient.

December 26th found the patient in a very serious condition. At 1 A. M., after chilling for an hour, she was suddenly seized with severe dyspnea, a marked sense of oppression and a sharp pain in the right inframammary region. Temperature 102.2, pulse 120, respiration 44. It was not difficult to make a diagnosis of an embolic process in the left inferior lobe (anteriorly) of the lung, inasmuch as there was present the ætiological factor.

That we had to contend with a hemorrhagic infarction of a considerable portion of lung substance was evidenced by the area of dullness and the bloody sputum that was expectorated. This sputum was very dark in color, having an admixture of little mucus. It had an appearance of solidity.

The patient's face gave evidence of the seriousness of her condition. There was a dusky flush usually upon both cheeks, but sometimes only upon one, and the drawn features portrayed a picture that presented a gloomy outlook.

December 27th, 6 P. M., temperature 104.6, pulse 130, respiration 32. For four days the temperature and pulse fluctuated. Temperature, 102 and 104 degrees; pulse very irregular, at times ranging from 120 to

140 beats. The day following, patient showed slight improvement. The dyspnea became less marked and the sputum began to show less blood, but it became very offensive. At 7 A. M., December 31st, the patient was suddenly taken with a very severe chill, marked difficulty of breathing and pain in the left inframammary region. The clinical picture so clearly defined during the invasion of the right lower lobe was here repeated only with a lesser intensity. The highest temperature recorded was 103.4, the pulse reaching 130 beats. The sputum again became characteristic. For two weeks the patient drifted along in a gloom that bid fair to deepen. The complicating diseases had racked her system severely and the latent powers of the patient had become well nigh exhausted, when, on January 20th, a normal temperature with an encouraging pulse of 98, intermitting about every tenth beat, was recorded. With the exception of a gentle deviation from the normal temperature curve and a pulse rate ranging from 88 to 98, the patient, for the following two weeks progressed favorably and was able to leave the hospital on March 1st.

#### DISCUSSION.

Dr. F. J. Taussig said that there was one thing about the question of thrombo-phlebitis that was worthy of consideration in the treatment, and that was a method which was being tested in European clinics. The great danger to the woman of metastases from the infected areas in the veins was the basis of this method. The uterine and ovarian veins were tied in cases where the thrombo-phlebitis



was located in the broad ligament. Of course this would not apply to a phlegmasia in the femoral region. Bumm, who reported his experiments along this line, was certain he had prevented septic particles being carried to the lungs, for instance, and prevented a general pyemic infection. In every case where there was a certainty of the condition being localized to these veins, it was a question whether this procedure should not be resorted to. The great trouble with every remedy for septic infection was that the individuals vary so much. Probably the great majority of patients subjected to such an infection as Dr. Reder described would have died; his survived. An experience of five or six years is needed to enable one to recommend any method of treatment as good, and thus far in the treatment of these cases of sepsis no method had stood the test, whether the serum method, panhysterectomy or what not. So, while this suggestion of Prof. Bumm seems a good one, yet the test of time would be necessary before it could be safely recommended. Reder, in his diagnosis, laid a great deal of stress upon his faith in the statement of the patient and attending physician. Dr. Tausig believed all were too ready to do that. Only recently, by not listening to the patient's statements, he had proved his diagnosis correct. It was an extra-uterine pregnancy in a married woman. The family physician also thought it was an extra-uterine pregnancy, but in talking it over with the patient's husband, the latter had said that such was absolutely impossible. He stated emphatically that it was impossible for her

to have become pregnant within the past four and a half months. Nevertheless, the removal of the patient to the hospital for operation was advised, and the patient was kept under observation for a week. During that week the patient recalled to the mind of her husband an instance of possible conception about a month ago. Had they acted upon the assumption that the first statement of the patient's husband was correct, they might have subjected her to the risk of an abdominal hemorrhage. It proved to be a tubal pregnancy of about four weeks' gestation.

Dr. Crossen expressed his gratification at Dr. Reder's courage in presenting this case, for the report of such a case did require courage. Such a report was of value in helping in differential diagnosis and in calling attention to the danger of a wrong diagnosis. He emphasized the importance of examination under anesthesia in these cases where there was doubt and where the diagnosis could not be made from the ordinary examination findings.

As to the operation of ligation and excision of infected thrombotic veins he felt that there was hope in that direction. These were desperate cases, and if the progress of the infection could be eliminated by this operation after the infection had left the uterus, the operation would mark a distinct advance in treatment. According to his recollection Bumm reported five cases, of which three recovered. The fact that some of these cases had not recovered, should not deter or discourage one, for these were extremely serious cases. Of course some patients would recover without any



treatment, thus emphasizing the individuality of patients as regards resistance to infection. Results must be obtained in a great number of cases by a great number of operators, in order that the true value of the operation may be established. Yet, he felt now that it was a reasonable procedure, and in suitable cases was preferable to hysterectomy, as it could be carried out more quickly and with less shock to the patient. The question he would like to have answered was, at what particular time or with what particular assemblage of symptoms, should the abdomen be opened with the idea of finding and ligating thrombotic veins. The abstract that he had seen did not bring out enough information on that particular point. Again, it would be a question before operation whether the condition present was a thrombosis, a cellulitis or a salpingitis. He had recently operated on a case in which the question of thrombo phlebitis would naturally arise. The patient had a miscarriage, followed by sepsis, for which she entered the hospital. Severe symptoms persisted in spite of the fact that the uterine cavity was clear. Examination findings indicated inflammation in the left side of the pelvis, probably tubal. When he opened the abdomen he found a left pyosalpinx and a distinct abscess in the uterine wall, probably from the interstitial portion of the tube. He noticed no particular enlarged vein or other marked broad ligament disturbance. In a good many of the cases presenting a supposed clinical picture of infected thrombo-phlebitis, there will probably be found pyosalpinx instead of thrombotic veins, or the two together.

However, if the ligation and excision of infected thrombotic veins proves, on further trial, to be an operation of real value the exact clinical indications as to the presence of this condition requiring operation, and as to the time for operation, will, of course, become more clearly defined.

The President appreciated very fully the doctor's position in the presence of the antagonism of the patient in not giving the correct history and the antagonism of the physician, but so far as his own experience went he had rarely found a fibromyoma in which there was not more hemorrhage than Dr. Reder had found. These patients rarely went for three or four months without recurrent hemorrhage. This point might have been a guide to him.

Dr. Crossen said that it should be remembered that cases did occur in which there were not these hemorrhages.

Dr. Reder stated that he had taken into consideration this question of hemorrhage in making his diagnosis.

The President added that a fibromyoma that did not endanger the patient's life and was not undermining the patient's health would stand a little waiting. He had seen patients who made just such statements and, not being an operator, he had made these patient wait. In regard to the infection which had occurred five days later, he asked Dr. Reder what was the condition of the uterus during that period.

Dr. Reder replied that the uterus was normal; there was no pain and subinvolution seemed to progress normally.

The President said that in all these

post partum cases when the uterus was flaccid, when there was a material rise in temperature, and when there was severe post partum hemorrhage and a suspicion that the uterus was not contracting as it should, he had for the past ten years acted upon a suggestion of Dr. Hodgen to give small doses of ergot, quinine and strychnine, using about 1-60 of a grain of strychnine and 1-2 dram of ergot, every three or four hours for four or five days. He had never had a post-partum phlebitis since he began using this, and was sure he had stopped a gradually developing infection in several cases. They had been held in check by keeping the uterus busy with the ergot—keeping it contracted.

Dr. Robert Funkhouser asked Dr. Hall how he treated his patients after confinement.

The President replied that as a rule he did not give them anything. Occasionally one found a flaccid uterus that did not respond to any stimulant. In some cases he had exhausted every means and been compelled to hold the uterus for hours. Replying to a question by Dr. Crossen, Dr. Hall said the patients did not complain of pain after the use of the ergot in the doses mentioned.

Dr. F. J. Taussig asked if the abdominal wall was very thick.

Dr. Reder replied that the abdominal wall was not unusually thick. The patient was a well-nourished country woman.

Dr. Taussig said that if they would make it a practice to detect as early as possible the fetal heart sounds the ear would become trained to recognize them earlier than was now possible.

It has been claimed that it was possible to hear them as early as the fourth month. At this time they could be heard only over the lower uterine segment. By introducing the finger into the vagina, pushing the cervix forward and upward, the lower uterine segment was brought up into the hypogastric region, and by listening in that region the fetal heart sounds could be heard in almost every case. With the amount of amniotic fluid it was readily comprehensible that it would be most difficult to hear these heart sounds over the fundus, but by pushing the lower segment up it had been claimed that they could be readily heard.

The President said that during his term of service at the female hospital it was the practice to examine every patient in the early months of pregnancy with reference to the determination of the heart sounds. In a service of over eighteen months he had never been able to detect the sounds as early as the fourth month, although he did not try lifting up the uterus. That seemed a rational procedure, as one could get nearer the fetal heart by raising up the lower segment of the uterus and avoid the thickness of the belly muscles.

Dr. Crossen said that, as he remembered the report, the gentleman who made this observation claimed to have been able to detect the fetal heart sounds as early as the thirteenth week. If this was possible, it seemed to Dr. Crossen that it would have been discovered long ago, for it was a question that had long been investigated. He noticed one report that seemed to contradict in a measure the observations mentioned. In a num-



ber of cases of an early fetus just expelled alive in miscarriage, or just removed by operation for extra-uterine pregnancy, the attempt was made to osculate the fetal heart sounds, but with very unsatisfactory results. Before accepting the statement that by pushing the uterus against the abdominal wall the fetal heart sounds could ordinarily be heard in the thirteenth week of pregnancy, he would like to see an accumulation of reports.

The president said he had an excellent opportunity in that line, as a great many women go to his clinic for diagnosis. He thought he would take up the matter and settle it for his own satisfaction. Training in this line made a difference, for he believed he could hear the fetal heart much more clearly when he made a habit of listening for it.

Dr. Reder, in closing, said there was one point that he should have recalled that might have been of some service in making the diagnosis of pregnancy as soon as the abdomen was opened and the tumor exposed. It possibly could have averted the handling and the delivery of the "tumor." The point in question was this: This tumor had the color of a ripe egg-plant; some uterine growths present a similar appearance. To differentiate between pregnant uterus and a tumor of the uterus it will suffice to draw the finger over the doubtful tumor, making gentle pressure. In the pregnant uterus a whitish line follows, which will again resume its former (blue-purple) color after the gentle pressure is relieved. In a myofibroma of the uterus this phenomenon will not take place.

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## OPERATIONS FOR THE RELIEF OF CICATRICIAL ORBIT.\*

BY JAMES MOORES BALL, M. D., of St. Louis.

A patient who had had an eyeball removed, and who finds at an early or at a late date that he cannot wear an artificial eye, is truly in an unfortunate predicament. It is only within the last few years that attempts to relieve such a condition have been successful. In this paper I will not take into account those simple cases in which a single adhesive band of limited extent unites the upper eyelid to the stump—cases which are easily relieved by severing the attachment and inserting an artificial eye, the same to be worn constantly for a few days and nights.

\*Read before St. Louis Medical Society, October 7, 1905.

I refer more particularly to those cases in which either the upper or the lower cul-de-sac, or both of them, is practically absent. In such a case contraction of all the tissues occurs, and the space at our disposal is often smaller than the finger-tip. To wear an artificial eye under such circumstances is manifestly impossible, unless we do like the surgeons of the sixteenth century, who, like Pare, had eyes made to be worn outside of the lids and held in position by a long tail-like projection which fitted over the corresponding ear.

In the past eighteen months I have operated successfully on two cases of cicatricial orbit.



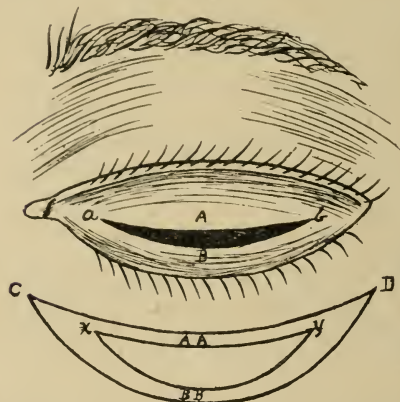
*Case 1.*—Miss M., aged thirty-one years, was referred to me by the late Dr. James A. Close of St. Louis. When six weeks old this lady had an inflammatory condition of the right eye. The eye burst and its contents escaped. When nine years old she began to wear an artificial eye. Six years ago the socket became contracted. She was operated by Dr. Close, who cut some cicatricial bands, after which for a time she was able to wear an eye in a misfit fashion. In June, 1904, she was no longer able to wear the eye, the space between the lids being not larger than a dime. I found the fornices practically obliterated, the lids being adherent to the orbital stump. On July 5, 1904, under chloroform anesthesia, I dissected the lids freely from the orbital tissue and applied Thiersch grafts, which were held in position by means of silver plates perforated for sutures. This operation was successful in restoring the upper cul-de-sac, but not the lower one. To restore the latter a different procedure, known as Maxwell's operation, was required. This, in short, consists in making a lower cul-de-sac of the loose skin of the lower lid, and can be understood by reference to the accompanying diagram.

After this operation the patient was able to wear an eye with comfort. A year has passed and she has no trouble.

*Case 2.*—Mrs. F., an elderly lady, was sent to me by Dr. M. J. Short, of Rolla, Missouri. The right eye was enucleated fifteen years ago by the late Dr. S. Pollack, of St. Louis. For two years Mrs. F. has been unable to wear an artificial eye. I found that

the upper cul-de-sac was contracted to one-half the normal size. The lower cul-de-sac was absent, the lid showing a pronounced ectropion.

On March 12, 1905, under chloroform anesthesia, I made the Maxwell operation on the lower lid. Then, at the same sitting, the upper lid was dissected to the orbital margin. A



MAXWELL'S OPERATION FOR ENLARGING THE SOCKET FOR AN ARTIFICIAL EYE\*.

Incisions are made through the skin from C to D. The piece thus included is dissected from the subcutaneous tissue, except the area from x to y, which remains for anchorage. An incision, a, b, is made in the orbit. The lower lid is undermined. The flap is pushed beneath the lower lid. AA is then stitched to A, and BB to B.

large artificial eye was introduced. It was immediately withdrawn, covered with large Thiersch grafts and re-introduced. It was kept in place for ten days. At the end of this time it was removed for a few moments. The grafts united kindly and this lady now has a large space for an ar-

\*Maxwell, P. W.: Operation to Enlarge Socket for Prothesis, Ophthalmic Review, May, 1903.

tificial eye which she wears with comfort.

It may interest you to know what has been done in this branch of surgery. In speaking of a similar condition, known as symblepharon (adhesion of the lid to the eyeball), Professor Czermak<sup>1</sup>, writing in 1893, said: "If we now turn to the operative attempts at relieving this condition we enter upon a very cheerless field, rich in experiments and failures. For a very long time the surgical art has been endeavoring, and up to this time with very little success, to conquer the rebellious forces which irresistibly try to reunite the separated parts."

Since that time, instead of employing the transplantation on the lid-surface of skin flaps from the cheek or temple, or Wolfe flaps, or grafting rabbit's conjunctiva or mucous membrane from the mouth, ophthalmic surgeons have employed Thiersch grafts with a fair measure of success. Such grafts form an ideal tissue for lining the wound surfaces of eyelid and eyeball in cases of symblepharon, and they form the most suitable means of restoring space for the artificial eye in cases of cicatricial orbit.

The reports of Hotz<sup>2</sup>, Morton<sup>3</sup>, May<sup>4</sup>, Axenfeld<sup>5</sup>, Lindstroem<sup>6</sup>, Natanson<sup>7</sup>, and Woodruff<sup>8</sup>, whose cases have been published, and my unpublished ones, show admirable results. Since the same principles apply in cicatricial orbit, I feel that such cases are now legitimate ones for surgical treatment.

Weeks<sup>9</sup> has recently reported cases successfully operated by sewing Wolfe flaps to the periosteum of the orbital margin. This is a very tedious and

complicated procedure. After the flap has been anchored a suitable plate is placed in the cul-de-sac and is kept there until the time arrives for the insertion of the artificial eye.

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#### DISCUSSION.

Dr. John Green, Jr., thought Dr. Ball was to be congratulated on the successful outcome of the two cases reported. The Maxwell operation as described by Dr. Ball, was a distinct advance in the treatment of cicatricial orbit. Thiersch grafts were effective when applied to the upper lid, but failed to accomplish the desired result when applied to the lower lid, and here the Maxwell or some similar operation was indicated. He asked if there was any puckering of the skin inclosure of the wound. Maxwell said there was some danger of that unless the skin edges were carefully approximated.

Dr. E. H. Higbee referred to the difficulty of keeping the grafts in place, and asked regarding the use of the artificial eye in this connection.

Dr. Green thought that if there

were any cicatricial contraction of the flap the tendency would be to entropion rather than to ectropion. The incision was well behind the lower lid margin so that traction downward would tend to draw the margin of the lower lid inward and backward.

Dr. Henderson said that as he understood it, the skin flap when transferred, left a bridge at each end. What he wished to know was, was there not a raw surface left in the lower lid, which by cicatricial contraction might produce a tendency to ectropion. He asked, too, whether a reform eye would not have been more satisfactory than a shell in holding the grafts in position.

Dr. Ball, in closing, replied first to the question in regard to the puckering of the skin flap. All that is necessary, if one has too much skin flap when one had completed the work, was simply to trim it off. As to contraction, when the lower lid was transferred to the orbit there would

be a raw surface situated externally and the skin margin would then be sewed to the skin below. After a few weeks there would be no evidence of an operation other than a small scar. As to Dr. Higbee's question regarding the use of the artificial eye for holding the grafts in position, he considered this the ideal method. In his first case the grafts were comparatively small, in the second case the graft taken from the lady's arm was an inch and a half square. Each day the dressing was taken off, the lower portion of the artificial eye was lifted up and irrigation was practiced. By this method of treatment it was now possible to relieve patients who were formerly refused treatment. Replying to Dr. Henderson's question, Dr. Ball said he did not think a "reform" eye would have been more satisfactory for holding the grafts in position. He had used a very large shell, as large as could be gotten into the orbit.

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## THE SUBSTITUTION OF THE ORGANIC SILVER PREPARATIONS FOR SILVER NITRATE IN THE TREATMENT OF DISEASES OF THE EYE.\*

BY JULIUS H. GROSS, M. D., of St. Louis.

The use of nitrate of silver in the treatment of diseases of the eye was revived by Von Graefe.

He considered as indications for the use of silver nitrate (and they are the same to-day) a hyperaemia of the conjunctiva accompanied by a certain succulence. And the greater the hyperaemia and the juiciness of

the conjunctiva, other things being equal, the greater the indication for its use.

In all inflammations of the eye in which this condition is present the nitrate of silver will be found very beneficial.

He considered as a contra-indication an anaemia and dryness of the conjunctiva.

After an application of a fairly

\* Read before the St. Louis Medical Society, October 7, 1905.



strong solution of silver nitrate to the conjunctival surface of the eyelids, a thin white scum or membrane covers the palpebral conjunctiva; it is composed of the superficial epithelial cells which have been killed by the coagulation of their albumen by the nitrate of silver.

This membrane is soon freed by the transudation from beneath it and washed out by the tears.

In this way the micro-organisms in the superficial layers of the conjunctiva are cast off.

Therefore it is not best to use nitrate of silver solutions late in the day for these cast off cells might be pent up by the lids during sleep and cause irritation and pain.

This caustic action which in many inflammations is of decided benefit is not possessed by the organic silver compounds.

When the classical conditions which indicate the use of nitrate of silver are present, I doubt if as much can be accomplished by any other mode of treatment.

At any rate my observations have convinced me that it cannot be accomplished by the organic silver compounds.

Last summer two hopeless cases of corneal trouble resulting from injury to and infection of the cornea came under my care.

They had been treated by an oculist and, as I ascertained, the treatment consisted of instillations of a solution of atropine sulph. grs. 4 to the ounce of water, t. i. d. and the use of a 25 per cent. solution of argyrol every three hours.

I have already said they were hopeless cases; they both understood this

when they came to me; and I lost no time in giving them a like prognosis. I shall separate the two cases.

In the first the cornea had begun to slough and each day pieces would come away. There was much discharge and the eye was very painful, especially at night. I dared not evert the upper lid for fear of parting the cornea, and so rupturing the globe; but by raising it gently and slightly pulling it away from the globe I could look beneath the lid and found that the conjunctiva was much inflamed and thickened.

All my training told me that I must here use a fairly strong silver nitrate solution or some other powerful germicide. Something which my past experience told me would stop the pus formation.

My choice fell on nitrate of silver solution, 3 grs. to the ounce, or 0.6 of 1 per cent.

I do not hesitate to state that I prefer silver nitrate to corrosive sublimate for the eye.

It was used somewhat freely, daily; the atropine and argyrol were also continued about as they had been used. After two applications of the nitrate of silver the discharge had much diminished and the eye was less painful. The cornea was too far gone and could not be saved; however the sloughing process had received a check.

Those of you who have watched cases of this kind have observed the great resistance which the inner layer of the cornea, *i. e.*, Descemet's membrane, offers. Now, in this case, a very interesting condition appeared. The corneal tissue sloughed away, leaving Descemet's membrane intact

and quite transparent, and through it the brown iris and dark pupil could be seen. Not only that, but the patient, too, noticed that he could see well again, and began to doubt my very pessimistic words as to the final outcome. Of course, it was only a matter of time when Descemet's membrane, too, gave way; but I am inclined to think that without the nitrate of silver applications it would have melted away much sooner.

The second case is a parallel to the first, except that the cornea was not quite so far gone. The treatment has been the same as in the first case, and this was continued, but I supplemented silver nitrate solution grs. 3 to the ounce, used carefully but not stingily. The palpebral conjunctiva was much swollen; there was a considerable discharge of pus. Eye quite painful. The cornea was still resistant, and I made a determined effort to save it. To provide additional nourishment to sustain the cornea through the critical stage I scarified the conjunctiva of the upper lid almost daily. Under this treatment the swelling of the conjunctiva soon disappeared, and the eye did well, fully as well as could be expected. The cornea did not slough, and some sight remained.

It is not my aim to disparage the value of the organic silver preparations, but simply to call attention to the fact that some practitioners are using them in preference to nitrate of silver where the latter would be much the better remedy.

It is my opinion that the reason many physicians do not like to use silver nitrate is because strong solutions cause pain. And I believe that as a rule they are used too strong.

I think that many text-books advise the use of solutions of nitrate of silver which are too strong.

Occasionally, too, we find a patient who does not tolerate silver nitrate solutions as well as other treatment.

As a rule, a solution of nitrate of silver should not be used stronger than 1 per cent., even in severe cases which require heroic treatment.

It should not be applied to the cornea when the cornea is not diseased.

After using the silver nitrate solution, the conjunctival sac ought always to be flushed out with some bland solution.

In the treatment of blenorrhœa neonatorum and blenorrhœa adultorum, *i. e.*, the conjunctivitis occurring in the newly born and gonorrhœal conjunctivitis of adults, the new silver salts have, I think, earned their best reputation.

Here, too, I should not feel safe and satisfied, if after the first stage, that of infiltration, the treatment consisted only of the use of any one of the new silver preparations to the exclusion of the nitrate of silver.

In the *Medical News* of October 10, 1903, Dr. Weeks says: "The danger to vision from gonorrhœal infection of the conjunctiva is indeed slight when vigorous treatment with strong solutions of argyrol is instituted." A strong statement.

I should like to ask those present if they fear a gonorrhœal infection any less since argyrol and the other new preparations of silver have come into use?

#### DISCUSSION.

Dr. J. C. Buckwalter had had some experience with the organic silver salts. He had recently had brought



to his office an infant four weeks old who was suffering from ophthalmia neonatorum (gonorrhœal), and had been treated three weeks with strong solutions of argyrol. A bacteriological examination was made, and the gonococci were found, but the condition of the eyes did not improve under treatment. Dr. Buckwalter had immediately stopped the argyrol, and substituted a two per cent. solution of silver nitrate, applied with a pledget of cotton, first cocainizing the conjunctiva with a two per cent. solution of cocaine, and immediately after using the silver nitrate solution, instilling a salt solution to counteract the irritating effect of the silver nitrate solution. The after-treatment consisted of a saturated solution of chloretone, used by the attendant at home, and cold applications renewed every two hours. There was no involvement of the cornea in this case. In nose and throat affections he had tried the organic silver salts, but they were not satisfactory. They were not irritating, but they did not accomplish the desired results.

Dr. John Green, Jr., referring to the teaching of the text-books regarding the strength of silver nitrate solutions, believed it to be in need of revision. Almost without exception they advise the use of one per cent. and two per cent. solutions in ordinary conjunctivitis, a procedure not only useless but often harmful. The main object was to induce a moderate astringent reaction, and a solution of one or two grains to the ounce was sufficiently strong. The transient discomfort soon passed away, even without neutralization with salt solution. Another point was the value of silver

nitrate in florid succulent conjunctivitis. The organic salts did not meet the conditions in these cases as well as the silver nitrate. In ophthalmia neonatorum, argyrol enabled the physician to cope with conditions better than silver nitrate. In one case of gonococcal ophthalmia in an infant that had come to his attention; the right cornea was the seat of a large central ulcer apparently on the verge of perforation. The other cornea showed a paracentral ulcer. A thirty per cent. solution of argyrol was used every two hours in addition to free irrigation with normal saline solution, and (later) potassium permanganate 1-2000. The outcome was all that could be desired. The deeper ulcer healed without perforation, and the other paracentral ulcer was prevented from spreading, and, in healing, left enough clear tissue to warrant the belief that an optical iridectomy would not have to be resorted to. He had observed a brownish discoloration of the base of an ulcer as the result of the free use of argyrol, which, however, passed away with the healing of the ulcer.

Dr. Henderson said that when protargol came out he had looked forward to it with a great deal of pleasure owing to the irritation caused by nitrate of silver. He believed he got as good results with it in most cases. When argyrol was introduced he used that, and found it a great advantage in most cases. Argyrol was practically non-irritating. A ten per cent. solution of protargol often caused pain. Recently he had used a ten per cent. solution of protargol in a case of ophthalmia neonatorum, and every time he put the solution in the eye



the child would cry and struggle violently. He substituted a twenty-five per cent. solution of argyrol, which the child did not seem to mind at all, and when he could apply the solution beneath the lid when the child was asleep, it would not awake. That was a considerable advantage. When a mother or nurse was expected to apply an irritating solution, one was at a considerable disadvantage. Dr. Buckwalter had spoken of using cocaine before applying the silver nitrate. Dr. Henderson did not believe in using cocaine in any eye case where there was a corneal lesion present or where there was danger of corneal lesion, owing to the drying influence on the cornea. Where there was a corneal lesion it would nearly always result in an increase in the area of infiltration. For this reason he nearly always used holocain, which not only does not dry out the corneal epithelium, but is also slightly antiseptic.

Dr. Green said that unquestionably cocaine in watery solution had a desiccating effect on the corneal epithelium, and it appeared to facilitate the spread of a corneal ulcer. He had found that an oily solution of the alkaloid of cocaine did not possess this disadvantage, and he did not hesitate to use it (combined with atropine, when necessary), in the presence of corneal ulcers.

Dr. Ball did not see any need for everting the lids for the purpose of treatment, although it is necessary for an examination. Simply separate the lids from the globe and permit the remedy to flow from the canthus into the conjunctiva. Argyrol, he thought, had come to stay. He had scoured

the first lot of it that reached the city, before any of the wholesale druggists had it. It would not give the desired result in all cases, but it had given him most excellent service. Since beginning its use he could not recall a case in which he had used protargol.

Dr. Henderson said Dr. Gross had asked one question which he believed no one had answered except indirectly, and that was, did they fear gonorrhœal infection any less since argyrol and other similar preparations had come into use. The speaker said he feared it much less.

Dr. Green seconded what Dr. Henderson had said. He believed argyrol had saved many eyes that would have gone under with the older treatment.

Dr. Gross, in closing, stated that he did not wish to disparage the organic silver compounds. They were of value, but when men made statements like that of Dr. Week, who said, "The danger to vision from gonorrhœal infection of the conjunctiva is, indeed, slight when vigorous treatment with strong solutions of argyrol is instituted," he thought this was, indeed, going too far. In gonorrhœal conjunctivitis (blenorrhœa neonatorum or ophthalmia neonatorum and blenorrhœa adultorum), in the first stages there were not the ideal and classical indications for silver nitrate; instead, there was a dry conjunctiva, so that a very caustic treatment of any kind would be injurious in the first stages. The question in the speaker's mind was, whether argyrol and protargol solutions were any more beneficial in that stage than a solution of boric acid or of alum, or any of those bland solutions. But in the second and third stages, where

the conjunctiva was no longer dry, then he would feel safer if he could use such a time-tried remedy as nitrate of silver. The organic silver compounds penetrated deeply into the tissues, but he thought most of the trouble was on the surface, and the slightly caustic action of the silver nitrate was very beneficial, and in using the organic silver compounds he would feel much safer to use the silver nitrate in addition than to rely

solely upon the organic silver compounds. The nitrate of silver had been used ever since it was revived by von Graefe more than fifty years ago, and it was the best remedy known for severe inflammations of the eye, especially when there were present the conditions already named as indicating its use. There were still some things to be proven about the new silver compounds.

### LIMITATION OF REST IN THE TREATMENT OF FRACTURES.\*

By ROBT. M. FUNKHOUSER, M. D., St. Louis.

There is hardly a lesion that requires more practical and skillful knowledge which the physician is called upon to treat, than that of fracture. Aside from the etiology and diagnosis, there are some points that are paramount in the treatment, but which are frequently overlooked or neglected. The surgeon at an early period of his studies assumes almost as a postulate that the fracture must be reduced, the sooner the better, and the ends maintained in apposition until union has been secured. But his surgical judgment and skill will be expected to do more—to foresee and avoid certain complications. Too many in the past have been content with reduction of the fracture and the application of a splint, permanent and irremovable, and to trust to nature to do the rest, not appreciating the fact that during the progress of repair the fracture may become displaced from various causes, and consequently the impairment of motion

and usefulness of the limb may follow; in some cases due to faulty methods and means of reduction, or to failure to keep the fracture reduced; sometimes due to the action of the patient, either consciously or otherwise; more frequently to the action of the muscles; in other cases due to adhesions, especially where the fracture is in the neighborhood of or connected with a joint.

The danger of deformity or impairment of movement, or both, following fracture, is greater than is commonly appreciated. Pott and Colles appreciated the fractures known by their respective names, but not only Pott but others writing rather recently of fracture of the lower end of the fibula, direct that in treating these cases of fracture of the fibula with injury about the ankle joint, “the splints ought not to be used for more than a *month* or *five weeks* (?) for fear of ankylosis, and at the end of that time the surgeon should begin to make passive movements, so as to secure the mobility of the joint.” The

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surgeon of to-day would hardly wait so long!

Some of these factors can be eliminated or controlled in a great measure by greater attention to detail, particularly by inspecting frequently the fracture, thus being enabled to detect and correct any deviation if present, and to begin massage and movement at a much earlier period than is commonly practiced. We must not forget that, even though the limb may appear to be straight, the ends of the bone may not be in apposition, and there is no one landmark that can absolutely guide us; as, for instance, in fracture of the leg, the line formed by the anterior superior spine to the middle of the patella and ball of the great toe. There is no proof of accurate apposition of the ends of the fracture, as the toe is easily changed and the ends of fracture moved. Nay, not even the skiagrams always tell the truth. The x-rays are rather deceiving, and a number of skiagrams should be taken at different angles and in different planes, as the volume, dimensions and form of the projected shadows vary with the distance of the object from the plate, and also with the distance of the object from the light, any obliquity of light, unless allowed for, giving rise to serious errors. Cases have been reported where the x-ray did not even disclose a fracture nor deviation of the fragment where the fracture existed. We must not lose sight of the fact that, although the direction of the limb be maintained, the performance of its functions depends more particularly on the preservation of non-atrophied muscles, mobility of articulation, or

solidity of ligaments and absence of tearing.

The object of the paper is not to offer anything new, perhaps, in the treatment of fracture, nor to discuss in detail each separate fracture, the different splints and means of treatment. Various kinds of splints or apparatus may be used. The methods and means will depend largely upon the fracture and the experience of each individual surgeon. I desire to direct attention to the treatment of fracture by massage and early mobilization *with removable splints*.

The treatment of fractures by massage and mobilization, if not originated by Lucas Championniere, was elaborated particularly by him and by others. The limb was merely supported by a flannel bandage or by sandbags also, or by trapping, no splints being used. With the addition of removable splints, it is an ideal method. It is applicable in all simple fractures to a greater or lesser extent, especially in fractures and dislocations near the ankle and elbow joints, for when there is a fracture near a joint, there is also a sprain, and adhesions are more apt to occur.

In cases where the patient is advanced in years, or there is present a dyscrasia, and it is feared non-union may follow, judgment will have to be particularly exercised in its application. In the use of passive movement in recent fracture, the principal object to remember is that it should be preceded by gentle massage, which has a soothing effect upon the irritable muscles, so that quite extensive movements can be made without spasm and contraction.



The treatment may be divided into passive, external and internal, and active. Under external is classed massage, which may be commenced as early as the next day after reduction of the fracture, and should be of the most gentle character. At the same time splints, removable, *should be* used to assist in support of fracture during the passive motion, which may be practiced from five to fifteen minutes for several days, the object being to allay spasm and aid in the absorption of fluid, etc. After the swelling has been reduced, the movements of the tendons and ligaments should be begun from the fourth to the tenth day by moving, for instance, the toes, separately or together, the foot, or the fingers and hand in like manner, the object being to prevent adhesions at seat of or over the fracture or in the neighborhood of the joint. Of course, it goes *without* saying that the fractured limb is supported by proper splints. After the second week passive motion, complete massage and voluntary motion may be employed for a quarter of an hour, more or less. The flexion of the limb is quite important, particularly in rheumatic and arthritic cases.

The above is but a brief outline, and can be changed to meet the needs of individual cases. Voluntary motion should not be allowed until after the second week, as it may prove harmful rather than helpful. By this treatment time is saved and the union of the fragments facilitated. Complete rest can be assured excepting during massage, which relieves the pain and alleviates the muscular spasm. It aids in the rapid absorption of the effused fluid. It tends to

prevent stiffness by hindering or lessening the formation of adhesions. It prevents the wasting of the muscles and assists in the preservation of the nutrition of the limb. It hastens very materially the time when the limb can be used.

#### DISCUSSION.

Dr. Edward Borek said he was specially interested in the treatment of fractures and had a wide experience in that line. Some twenty years ago when the Missouri State Medical Society met in St. Louis he had presented his method of treating Colles' fracture. His method was, and still is, to use a single splint, leaving thumb and fingers free. He looked at them every day, and as soon as possible removed the bandage, had the hand laid upon a table and washed with soap and water (you cannot hurt the fracture!), redressing it again and allowing the patient to use the fingers, even permitting him to use a spoon or fork. Dr. Borek had borne a good deal of criticism and sarcasm because of his method, as other members of the society had been used to extending the fingers, using a splint an inch beyond the fingers and leaving it on at least forty days. He had done this in his early days, but every case had stiff fingers. After adopting this plan in the treatment of Colles' fracture, though he had treated a good many cases, not a single one turned out badly, and all could use the fingers. Dr. Moore, of Oldchester, never used a splint at all, merely a bracelet dressing, and he had good success. The speaker had never had a law suit as a result of his work, but had been threatened with one. The patient was an old lady. He had dressed the

hand and did not see her again. She had gone to another surgeon, who immediately took the splint off, put on another extending an inch beyond the fingers and kept it there. A few months later the patient had again called on him and said. "Look at those stiff fingers." Dr. Borch said, "Who did it?" to which the lady had replied, "I have been told you did it, that you dressed it wrong in the first place, and if I had the money I would hire a lawyer to sue you." The doctor replied that if that was her only reason for not bringing suit he would write out a check with which she could pay a lawyer to bring suit against him. He hoped some time to bring down some of the patients he had treated in this way. One was a dislocation of the elbow joint and a Colles' fracture. The patient was a little boy, and he would defy anybody to-day to tell that those bones had ever been fractured. He was gratified to hear the views advocated by Dr. Funkhouser.

Dr. J. H. Tanquary thought a great many of the laity still remembered the old method of treating fractures. When a physician was called upon to treat a fracture he thought it should be put up in a stiff dressing and need not be looked at again for four weeks; then the splint could be taken off and the case was cured. Because of this former custom he had experienced some difficulty in getting his patients to return for proper treatment and inspection. Dr. Funkhouser's plan of massage was probably the best that could be carried out. It had been his habit to open up the arm more for inspection than anything else. He rarely permitted it to remain more than four

or five days without removing the splint and washing the parts, having the fragments of bone held in position. He had also been in the habit of using massage. The union between the bones should be disturbed as little as possible. The more disturbance the more callus would be thrown out. But very gentle massage was not objectionable. There was no reason why these dressings should not be opened up the second, third or fourth day. There was no danger of displacement of the fragments if done carefully, and if there were a tendency to displacement, it could thus be detected and corrected. Many deformities following Colles' fracture were due to neglect or carelessness. In regard to passive motions of the joints, he did not think it likely that any one would have ankylosis if, after the joint had rested twelve or fifteen days, it should be opened up and passive motion practiced. He did not consider it necessary to introduce passive motion before that time.

Dr. A. W. Fleming, referring particularly to Colles' and to Pott's fractures, said the first point to be considered was that not enough attention was given to a thorough reduction. If thoroughly reduced, the matter of a splint was not important. He objected to the term "Colles' fracture," for Colles did not describe one-tenth of these so-called Colles' fractures. No one man has covered the conditions. Each type must be treated as an individual fracture. Stevens, of Philadelphia, taught that, once reduced, a simple little splint, one-half inch wide and four or five inches long, placed on the back of the wrist, was all that was necessary. Of course,



there were cases in which pieces of bone were broken off, or tendons ruptured, that would require something more than this simple dressing. But ordinarily this little splint and two strips of adhesive plaster, one about the wrist and the other about the hand, was all that was required. He had been much pleased with Dr. Funkhouser's remarks in regard to massage and passive motion. No elbow should be allowed to go over a week without the dressing being taken off and the limb moved a little, and then brought back into the position in which it was originally placed. The same was equally true of fracture of the ankle. Pott, he believed, had a small conception of what fracture of the ankle really was. By a sprain fracture was meant one in which the tips of the malleoli were torn off and the foot dislocated, either outward or inward. Those fractures occurring two or three inches up on the fibula, which Pott described, gave no trouble. There was no reason why these fractures should not be called by some anatomical name, for it was unreasonable to assume that any one man knew all about the subject. His experience in the work was that the textbooks all gave these fractures too much time to heal, the humerus, for instance, being given four or five weeks. Four or five days could be cut off the period named, for all these fractures give a much better result. The atrophy that resulted made it all the more important to use massage. In children and young adults the limb might be safely left three or four weeks and no atrophy result, but in old people, with a lithemic condition, the ecchymosed blood must be gotten

out of the part as soon as possible, and in the large majority of cases one not only lessened the pain, but got a better-shaped limb in consequence.

Dr. Wm. H. Stauffer asked Dr. Funkhouser to give his experience in the treatment of patellar fractures and the method he applied in such cases. The speaker had a personal experience in this kind of fracture, and wished to know the doctor's method. Four years ago he had fractured the knee cap of his good limb. The treatment was so eminently satisfactory that good bony union resulted, and completely restored the limb.

Dr. Funkhouser, in closing, said that in the past, too much time had been allowed to elapse before motion of the limb was begun, and many bad results had followed, which otherwise could have been avoided. He still liked to do honor to the Nestors of the profession, and there was no question that Colles did more to elucidate the type of fracture which bore his name than any man preceding him. Dr. Funkhouser simply used the word Colles as a generic term including all fractures at the lower end of the radius. Pott certainly did credit to the profession when he described fracture in the neighborhood of the ankle joint. Here there was not only a fracture, but a sprain to deal with. In Pott's fracture the internal and sometimes the external lateral ligaments were torn, and there might also be a sliver of bone detached from the malleolus. But the points of importance were: Bear in mind the use of removable splints; massage, of course, after the fracture is perfectly reduced, and passive motion. He had not attempted to enter upon the different



methods of treatment, but the fact had been borne in upon him that the limb must be used sooner than had been customary, and to do this it was necessary to resort to passive motion. He tried to make the distinction between passive motion and voluntary motion. The points he tried to bring out applied chiefly to simple fractures. As to operative treatment, he would be inclined to conservatism—to hesitate before resorting to that method, unless there was some special necessity for cutting down upon the fragments and wiring them. It had been suggested that in the treatment of Colles' fracture, if anything, there should be an overreduction. Even if this method was resorted to, and the fracture overcorrected, yet there was no reason why massage should not be used. By the ambulatory treatment, most brilliant results had been obtained. There were cases where it might be dangerous to keep patients

flat on their backs, and the ambulatory method was the proper course to pursue. But these cases were antithetical to those outlined as simple fracture. As to fracture of the patella, he doubted if it was wise in all cases to cut down and wire the fragments. Much depended upon the kind of fracture, whether stellate or not. The treatment would depend largely upon the patient. They were usually unwilling to have the patella cut down upon and wired. The great majority of patients prefer to take their chances without such a procedure. If one succeeded in getting a fibrous union, he was to be congratulated, especially if the patient had good motion. The object of the paper had not been to take up any special means or method of treatment, but merely to emphasize the necessity for massage, passive motion and removable splints.

—JOURNAL—

# MISSOURI STATE MEDICAL ASSOCIATION

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## EDITORIAL.

### AIMS OF THE MEDICAL SOCIETY.

In 1778 the physicians of Litchfield county, Conn., met and organized a medical society. The reasons for forming the organization were "that they should lay a foundation for unanimity and friendship which is essential to the dignity and usefulness of the profession." They also agreed to meet once in three months; also that they would assist each other without reserve in all cases where counsel is necessary, and that all who have been in regular practice one year might become members; also that they would communicate their discoveries in science and medicine and open up a correspondence with the medical societies in the neighboring states and in Europe.

A more practical set of resolutions than these cannot be framed by any society, and the spirit which prompted these, our forefathers in medicine, must be pertinent in our societies of to-

day if we expect to gain the best from them.

It must be the aim of the society to promote "unanimity and friendship, which is essential to the dignity and usefulness of the profession." Unfortunately the friendship which many of the profession have for each other is not of the Damon and Pythian type. Unanimity is lacking in so many instances, "unity, peace and concord" too often is wanting, sympathy is a foreign element. This is largely due to the fact that the members of the profession are not acquainted with each other, and, if known at all, only through rumors emanating from some disgruntled person. Above all else, friendship and unanimity should exist among physicians and this can be brought about by becoming acquainted one with the other. What better place can there be to meet each other than the society? It is there we can meet pro-

professionally and socially, and when we know our fellow practitioners better, we will have a higher opinion of them and learn to know them for their real worth.

Again no busy practitioner can keep abreast with the vast strides medicine is taking, no matter if he does fill in his spare moments by reading. To such a physician a good live society furnishes the means by which he can keep in touch, not only with his fellow practitioners, but with the progress of the world. The interchange of ideas, the "rubbing up" against men who are the acknowledged leaders, all help even the good physician to become a better one, and will teach the self-reliant man that there are others equally good if not better.

It should be the aim of the society to make its meetings as instructive as possible, and this can be done in no better way than by the exhibition of interesting cases. Often to see the disease is to learn the diagnosis, for seeing is better than reading a description. This exhibition feature should be made prominent, especially in the county society, for few even in the city have time to attend the clinics.

It should be the effort of the society to establish a better relation between the laity and the profession. It is a lamentable fact that the profession does not receive the respect from the public that it merits, considering what has been done to promote public welfare. This perhaps is due to that class of self-styled practitioners who spend their time imposing their zealous ignorance on an over-credulous people and fighting rational medi-

cine and sanitary science. It is due to their persistent efforts that the public has been blinded to the great work done and the wonderful results obtained benefiting mankind.

It is the duty of the physician to educate the public along all lines, scientific medicine as well as advancement in sanitary science. The average person, if he will but stop to think, can discern between a quack and the reputable physician. Some societies, at one or more of their meetings, have some physician give an address on some subject of interest. In this way much can be done to teach the people that through the aid of sanitary science the longevity of our race has increased from twenty-two years to thirty-eight years in the last century. "That while small-pox, causing 10 per cent. of all deaths, claimed 400,000 victims in Europe in the year 1800, less than 400 deaths occurred from the same disease in the same length of time 100 years later." When the people learn this and how other plagues which formerly swept over the land almost depopulating large areas, are now reduced to a minimum, they will begin to realize the debt of gratitude they owe to our self-sacrificing profession and they will be more willing to render us the credit due our efforts.

The well organized society should agitate rational legislation so that none but the qualified should be permitted to practice medicine. Laws should be enacted against such "grafters as the blatant quack, the ignorant pretender, the soothsayer, the clairvoyant and the subject of that mild form of mental disease which is characterized by a persistent attempt to



prove that what is is not." Suitable sanitation laws should be agitated, in fact anything that concern the public weal.

The society must meet, study and solve many of the important sociological and economical problems. It must furnish a stimulus for all that is high and good. It should be a mine rich in everything for the uplifting of humanity, morally, physically, intellectually and spiritually, and it should "cherish the memories, the virtues, the achievements of a class which has benefited the world as no other has, and of which we may feel proud that we are members."

S. S. S.

#### BEHRING'S STRANGE PERFORMANCE.

Professor V. Behring, the putative discoverer and once the patentee of the antitoxin of diphtheria, improved the occasion of the meeting of the Congress on Tuberculosis in Paris last month to make a premature announcement of a new remedy for tuberculosis. A curious thing regarding this was that, although the Tuberculosis Congress was in session at the time, the announcement was made to a reporter of the *Matin*, a daily paper of Paris, and repeated in an interview with a representative of the *Figaro*, and only then was the alleged discovery related to the members of the congress in a paper read at the last session of that assembly. Another strange thing was the announcement that the remedy will not be available until next August, and that even then its composition and mode of preparation will be kept secret. This, however, was in accordance with the prin-

ciple, of which Behring has always been a conspicuous advocate, that a discoverer is entitled to the pecuniary rewards of his discovery.

It is unpleasant to see a man of Behring's scientific attainments controlled by such a mercenary spirit. But that is, of course, no argument against the possibility of his remedy being efficacious in both the prevention and cure of tuberculosis. In the paper read on the last day of the Tuberculosis Congress, he said he had discovered the existence of a curative principle entirely different from antitoxin in its mode of action. It is this principle, he said, which plays the chief role in the immunity conferred by this "bovovaccine." The method is based upon the impregnation of the living cells of the organism with a substance derived from the tuberculosis virus residing in the yellow tubercle. This substance he has named T. C. The preparation is said to be in the form of a powder. The reports of the paper contained in the press dispatches are not very illuminating, and while it is possible that the scientific reports may be more intelligible, it is not probable that Behring has described his method in any but the most general terms. The fact of the value of some of Behring's previous therapeutic achievements offsets in a measure the inherent improbability of the discovery of a cure for tuberculosis. No one, at least no one entitled to speak with authority, denies at the present day the efficacy of antitoxin in the treatment of diphtheria. One hears less of his preventive inoculations against tuberculosis in cattle, but the method was adjudged of sufficient merit to entitle him to the

Nobel prize of \$40,000 in 1901. Two years later he announced the extension of this prophylactic measure to the human infant, but this does not seem to have won acceptance by the medical profession, at least not so universally as his first great discovery. The discussion of the efficacy of this new method is, however, only in the academic stage, as yet, for the remedy will not be procurable for nearly a year, and until it has been extensively tried it will be impossible to determine its value.

The bold proclamation which Behring makes of his determination to keep his remedy secret so that he may reap the pecuniary rewards of his therapeutic discovery is reprehensible, but it is in keeping with his previous acts. It will be remembered that in 1898 he secured a patent in the United States on the diphtheria antitoxin, and the chemists who made it for him served notice on physicians and manufacturers that anyone using any but the patented Behring antitoxin would be prosecuted. The attempt to create a monopoly of this life-saving remedy failed, but through no fault of the greedy scientist. At that time there was an outburst of indignation in the press, both lay and medical, not only in this country but in Germany and throughout the world, which would have given pause to anyone with a thinner skin than Behring, but it apparently did not disturb him in the least.

If the remedy now announced should prove to be all that its discoverer claims for it as a certain preventive and cure of tuberculosis, it will be interesting to note its reception by those who have conscientious objec-

tions to the use of secret remedies, or nostrums, whatever therapeutic value they be shown empirically to possess.

If they consent to employ the curative, but unethical, remedy, they must do violence to their principles; if they refuse, their patients will settle the question for themselves with deplorable disregard of the ethics of the case. But this is purely speculative, and by the way, for we confess to much scepticism as to the validity of V. Behring's claims, and we fear T. C. will follow T. R. in the long procession of cures that fail to cure.—*Medical Record.*

#### THE ORIGIN OF CANCER.

The pathogenesis of cancer must still be acknowledged as belonging to the unsolved problems in medicine. Some perhaps may claim that this statement should be modified in the light of recent investigations, nevertheless, it may be quite truthfully said up to the present time that no satisfactory answer has been returned to the question as to whether cancers and other neoplasms arise through a modification of the formative process or whether they are the outcome of an inflammation due to the intrusion and growth of specific microorganisms or to other external irritants. In other words, is cancer dependent upon an intrinsic or an extrinsic cause? The growing tendency of late years to ascribe most pathological processes to a germ infection, has rather overshadowed the older theories, but it still remains for the microbists to furnish convincing proof of the truth of their claims than they have thus far done.

In the genesis of neoplasms, as



well as of all other organic structures, there are two factors to be considered, namely, the cells from which they are derived and the force which regulates this cellular activity. In a healthy body, cell division proceeds until the organ is fully developed, and then the process continues merely as a reparative one. There is a restriction to growth within certain bounds, but the guiding force may be affected by pathological conditions which inhibit its restricting influences and the cells continue to multiply in a lawless manner. We do not know the nature of this mysterious force, although some ascribed it directly to the nervous system. An interesting, rather than convincing, article, in the form of a plea for this theory, has lately been published by R. A. Hodgson (*Medical Press*, August 9, 1905). He calls cancer a nerve disease with local manifestations, and claims that any specifically shaped bodies connected with it are the result rather than the cause of the disease. Moreover, he believes that the greater frequency of cancer in the later years of life is due to the fact that at this time the body has less reserve nerve force, all the tissues in his opinion being controlled by nervous influences, whether histologists are able to demonstrate the presence in them of nerve elements or not. The increase of cancer at the present time, he thinks, may also be explained by the greater demands now made on the brain and nervous system in general, which, having a greatly diminished reserve store of energy, is less able to resist long-continued irritation.

According to Hodgson, the true pathology of the condition will be

cleared up only when we are able to obtain accurate chemical analyses of healthy nerve structures, and can compare them both qualitatively and quantitatively with those taken from the neighborhood of the disease.

The author's reasoning is ingenious, but is hardly logical enough to clear up the question. The "nervous wear and tear," which he and many others are ever ready to accuse of numerous ailments with which man becomes afflicted, is not so universally prevalent among all classes of the population as we are led to believe, and those classes which might perhaps be placed in this category are not more frequently the subject of cancerous diseases than any others. The idea that some inherent force in the body initiates and governs the growth of neoplastic formations, is fraught with many elements of plausibility. But to assert that it is a force generated in the nervous system, would amount to the making of a claim which is not based on demonstrated facts. There is present in all living bodies a vital principle or force, still unknown and undefined as regards its character and laws, which governs growth and reproduction generally without the medium of such gross structures as may be represented by the nervous tissues, and it is to disturbances of this that we may have to attribute some of the hitherto unclassified pathological processes, cancer among them.—*Medical Record*.

#### POTASSIUM IODIDE IN THE TREATMENT OF SYPHILIS.

It seems that a sort of campaign has been instituted against the use of potassium iodide in the treatment of



syphilis. There are those who say that it is noxious and sometimes dangerous, and, moreover, that it is ineffectual. They would restrict anti-syphilitic medication to the employment of mercury. So great an impression have these persons made that M. Pautrier finds himself constrained to champion the maligned iodide in the *Presse Medicale* for September 9th, and it must be said that he does it effectively.

The iodide is accused of giving rise to such grave conditions as œdema of the glottis and interstitial nephritis, which occasionally prove fatal, to say nothing of its effects on the skin. It is only very exceptionally, says M. Pautrier, that fatal œdema of the glottis has been caused by the drug, or that there is encountered an idiosyncrasy that precludes its safe and pleasant enjoyment. As for nephritis, there is pre existing renal trouble in the cases in which the iodide damages the kidneys, and this can be ascertained before one decides whether or not to prescribe it. It is true, also, that the drug is apt to disorder the digestion, but this effect can almost always be prevented by varying the mode of its administration. Sometimes it causes great irritation of the eyes, but only when reacting, when eliminated in the tears, in such a manner as to give rise to the formation of a very irritating iodo-mercurial compound.

As to the charge that potassium iodide is ineffectual, accumulated clinical evidence makes it sure that many of the manifestations of syphilis yield promptly to it when mercury alone acts but very slowly, if at all. Especially beneficent is its action on the

arteries, which are prone to grave changes as the result of syphilis. Potassium iodide should by no means be given up in the treatment of that disease, though it may quite properly be rated as subordinate to mercury.—*New York Medical Journal*.

#### MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The annual meeting of the Mississippi Valley Medical Association was held at Indianapolis, Ind., October 10th, 11th, and 12th. The attendance was large and the program excellent.

The address of the retiring president, Dr. Bransford Lewis of St. Louis, on "The Unrecognized Responsibilities of the Press and State in Conserving Health," can be profitably read by the entire medical profession. It is one of the clearest and best statements of the subject that has appeared.

The address of Dr. W. D. Haggard of Nashville, Tenn., on "The Present Status of the Surgery of the Stomach," is well worthy of mention.

The German House, where the meetings were held, was well adapted for the purpose. The entertainments were numerous and of high order, and altogether the thirty-first annual meeting may be considered most successful.

The following officers were elected for the ensuing year: President, Dr. J. Henry Carstens of Detroit, Mich.; first vice-president, Dr. Joseph Rilus Eastman of Indianapolis, Ind.; secretary, Dr. Henry Enos Tuley of Louisville, Ky. (re-elected); treasurer, Dr. S. C. Stanton of Chicago (re-elected). Hot Springs, Ark.,

was selected as the place for the annual meeting in 1906.

#### COMMENDABLE VIGILANCE.

The members of Cass County Medical Society are making strong efforts to rid the county of illegal practitioners. As a result of the work done recently, one man was arrested and fined for practicing medicine without a license and is now serving a term in the county jail. Another man was arrested for practicing medicine illegally. His trial has been twice continued and is now set for the November term of court.

#### A NEW STATE JOURNAL.

The *Journal of the New Mexico Medical Association* is one of the latest state journals to be established. The second number was issued September 15th. Dr. G. W. Harrison, of Albuquerque, is editor, and Dr. G. S. McLandress is associate editor. It is issued quarterly. We congratulate the New Mexico Medical Association upon its enterprise, and wish all success for the publication and for the state association.

#### ERRATUM.

In the discussion of Dr. Lewis's paper, published in our October issue, Dr. H. J. Scherck was made to say the following: "In cases of gonorrhœa, an infected catheter is often introduced into an aseptic ureter, because we know that we frequently have cases of violent cystitis with positively no urethritis." The last word should have been "ureteritis."

#### DR. K. WERNICKE.

Medical men generally will regret the death of the German neurologist, Dr. K. Wernicke. At the age of twenty-six he originated the present conception of aphasia and its pathology. His research in the anatomy of the nervous system enabled him in 1882 to locate brain tumors.

Few have accomplished more for the benefit of students of medicine than Wernicke. While other scientists preceded him in histology, he was the first to bring the surgeon in close touch with a field which had been occupied by neurologists.

#### CORRESPONDENCE.

Editor JOURNAL MISSOURI STATE MEDICAL ASSOCIATION:

I should like to see a copy of that new law regarding the sale of poisonous drugs. Has it been published in your journal? If not, then you might favor some of your readers by printing an extract giving the essentials regarding the same.

Yours truly,

F. DAMOUR.

[In response to the above request we print the act in full.—Ed.]

#### AN ACT TO REGULATE THE SALE OF COCAINE AND OF PREPARATIONS CONTAINING COCAINE.

*Be it enacted by the General Assembly of the State of Missouri, as follows:*

Section 1. It shall not be lawful for any druggist or other person to retail or sell or to give away any cocaine, hydrochlorate or other salts of or any compound of cocaine, or preparation containing cocaine, or

any salts of or any compound thereof excepting upon the written prescription of a licensed physician or licensed dentist, licensed under the laws of this state, which prescription shall only be filled once. Provided, that the provisions of this section shall not apply to sales in the usual quantities at wholesale by any manufacturer or wholesale dealer when such manufacturer or wholesale dealer shall have affixed to the box, bottle or package containing such cocaine, hydrochlorate or other salt or compound of cocaine or preparation containing cocaine, a label specifically setting forth the proportion of cocaine contained in any preparation.

Sec. 2. Every person who shall be found guilty of violation of the provision of this act, shall, for the first offense, be fined a sum not less than ten dollars, nor more than fifty dollars, and for each subsequent offense not less than fifty dollars, nor more than two hundred dollars, or imprisonment in the county jail not

exceeding ninety days, or either or both in the discretion of the court.

Approved April 9, 1905.

### THE OFFICIAL ROSTER.

In the December issue of the JOURNAL the roster members will be published. It is a matter of great importance that the list of the members of the Association and their post office addresses be absolutely correct. In no other way can the JOURNAL reach the members promptly. In order to make the list correct, the secretary of the Association must depend upon the secretaries of the county societies for the accuracy of his list.

A list of the members of each county society, as now on file in the office of the secretary, has been forwarded to the secretary of the county society. It is earnestly requested that this list be carefully revised and promptly returned. Attention is directed to the spelling of the names of the members and to post office addresses. Accuracy in these details will obviate delay in receipt of the JOURNAL.



## COUNTY SOCIETY NOTES.

### BUCHANAN COUNTY MEDICAL SOCIETY.

Dr. P. I. Leonard, President.

Dr. Charles Wood Fassett, Secretary.

The meeting of October 7th was called to order by the president, Dr. P. I. Leonard. After approving the minutes of the previous meeting, Dr. J. B. Riley was elected to membership in the society. Resolutions on the death of Dr. P. J. Kirchner and Dr. J. H. Stringfellow were adopted and ordered sent to their respective families.

The paper of the evening was read by Dr. W. J. McGill, his subject being "Constipation." The various etiological factors were considered, especial stress being placed on irregular eating, improper food and irregular habits. The fact was brought out that, while constipation may exist for months with fair health, sooner or later troublesome symptoms follow, such as hemorrhoids, ulceration of the colon, enteritis, occlusion and neuralgia of the sacral nerves. At times the fecal mass may become channeled, and diarrhoea occur, and persist till the cause, viz., the fecal mass, is removed. These cases often present fever, and may resemble typhoid.

In the treatment of constipation too much reliance has been placed on cathartics and injections, and too little attention given to the establishment of regular habits in eating, exercising, sleeping and attending to the calls of nature. The non-medical treatment as recommended by Gant was particularly rec-

ommended. This consists of divulsion of the sphincter and removal of any mechanical obstruction. Copious injections of warm water in the beginning of the treatment, and the application of electricity to the abdomen and rectum. This, coupled with correct habits of eating, exercising and attending to the calls of nature, will usually prove efficient. In long-standing cases it may be necessary to resort to cutting the hypertrophied sphincter or doing a valvotomy. For the latter procedure the author favors the clamp operation as suggested and practiced by Pennington, of Chicago. This consists of placing the clamp on the valve and allowing it to separate by necrosis.

The paper elicited a general discussion. Among those taking part were Drs. O. B. Campbell, Jacob Geiger, S. F. Carpenter, J. B. Reynolds, T. E. Potter, A. L. Grey and W. T. Elam.

CLARENCE GOOD, Reporter.

### CALLAWAY COUNTY MEDICAL SOCIETY.

Dr. J. F. Harrison, President.

Dr. Martin Yates, Secretary.

The Callaway County Medical Society met in regular session at Fulton on October 12th, eight members being present.

Dr. Crews, of Williamsburg, read a paper on "Dysentery." In the treatment of this disease the essayist advocated preliminary evacuation of the bowels, followed by large doses of ipecac, preceded by an opiate. He advised very strict attention to diet,

and that the patient be kept in a recumbent position. A general discussion followed the reading of the paper, and the doctor's views were in the main endorsed by the members.

Dr. Nichols, of Hams Prairie, read a paper on the "Pathology and Treatment of Typhoid Fever." This paper elicited considerable discussion from the members, and the essayist was congratulated upon the manner in which he presented the subject.

The next meeting of the society will be held at State Hospital No. 1, as the guest of the superintendent, Dr. Williams.

MARTIN M. YATES, Secretary.

#### CHARITON COUNTY MEDICAL SOCIETY.

Dr. H. C. Tatum, President.

Dr. C. A. Jennings, Secretary.

The regular quarterly meeting of the Chariton County Medical Society was held in Salisbury on September 28th. The president, Dr. Tatum, presided. Minutes of the previous meeting were read and approved.

Dr. C. A. Jennings, of Salisbury, read a paper on "La Grippe." The paper aroused the interest of all the members present, and was thoroughly enjoyed.

Dr. Tatum presented an interesting clinic. The patient, a man aged forty-eight, was operated on some months ago for carcinoma of the testicles. Both testicles and the penis were removed. The operation was successful, and the wound healed nicely. The man now exhibits symptoms of a melancholic character.

The next meeting will be held in Salisbury at 8 P. M., October 19th.

W. L. BAKER, Reporter.

#### CLAY COUNTY MEDICAL SOCIETY.

Dr. L. J. Jones, President.

Dr. F. H. Matthews, Secretary.

Meetings of the Clay County Medical Society were held in Liberty, on August 28th, and on September 25th. There was a large attendance at each of these meetings. Typhoid fever and malarial fever were discussed respectively, and much of interest and profit was brought out. Splendid interest in scientific work is shown and good fellowship exists in the society to a remarkable degree.

In October this society will meet with the Tri-County (Clay, Platte and Clinton) Society at Smithville.

F. H. MATTHEWS, Secretary.

#### CLINTON COUNTY MEDICAL SOCIETY.

Dr. John Sturgis, President.

Dr. E. A. Colley, Secretary.

The regular monthly meeting of Clinton County Medical Society was held in Plattsburg, on October 4th, with a fair attendance of the members. No scientific program had been prepared for the meeting, and, therefore, the evening was devoted to reports of cases.

Dr. R. W. Rea reported a case of cancer of the tongue, which had been diagnosed as syphilis by several pathologists. Drs. Winn, Sturgis, Steckman and Colley reported similar cases which they had observed in practice.

The society voted to change the date of meeting from the first Wednesday in the month to the first Tuesday. It was found that this change would enable a number of physicians to attend the meetings who could not do so otherwise.

The committee on program for the next meeting consists of Drs. John Sturgis, W. J. Winn, P. M. Steckman.

The next meeting will be held at Plattsburg on November 7th.

E. A. COLLEY, Secretary.

### CALDWELL COUNTY MEDICAL SOCIETY.

Dr. R. K. Dodge, President.

Dr. Tinsley Brown, Secretary.

The Caldwell County Medical Society met at Kingston, on October 4th, the president, Dr. R. R. Dodge, presiding, Members present: R. K. Dodge, Tinsley Brown, B. F. Carr, R. L. Mount, J. O. Wilkerson, W. S. Shouse, G. W. Goins, C. O. Dewey, W. T. Lindley, L. J. Eads and H. De Lemeter.

Dr. B. F. Carr presented a patient, a man fifty-seven years of age, who had suffered from an abscess in the left side of the chest. The case was examined by the members and the cause and treatment of the condition thoroughly discussed.

Dr. W. T. Lindley read an interesting paper in which he described the care and treatment of surgical cases in the home of the patient, or outside of hospitals, and held the view that nearly all surgical cases could be cared for and operations performed in the home with perfect safety if proper care was given patients. The discussion following the reading of this paper showed that a variety of opinions were entertained by the members.

Dr. B. F. Carr read a paper entitled "Some Diseases of Children and their Causes."

Dr. Dodge reported a case in which

labor came on at the seventh month after the woman had carried a dead fœtus for some time.

Dr. Dewey reported a case of criminal abortion in which the placenta had been retained for some time.

The special committee on fee bill was continued until the next meeting. Essayists appointed for the next meeting: Drs. H. De Lemeter, J. O. Wilkerson, W. S. Shouse and C. O. Dewey.

The next meeting will be held in Cowgill, January 3d.

TINSLEY BROWN, Reporter.

### COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.

Dr. John R. Lionberger, Secretary.

The Cooper County Medical Society met in regular monthly session at the Woodman Hall in Boonville, on October 3d, 1905. The president, Dr. P. L. Hurt, called the meeting to order.

Members present: Drs. P. L. Hurt, F. R. Smiley, R. L. Evans, John R. Lionberger, J. T. Taylor, E. M. Allee, O. W. Cochran, J. S. Parish, G. A. Russell and W. E. Evans.

Dr. R. S. Holman, having removed to St. Louis, his position as secretary-treasurer was, upon vote of the society, declared vacant, and Dr. John R. Lionberger was elected to the office of secretary-treasurer. The minutes of the former meeting were then read and approved.

Dr. P. L. Hurt presented a case of chronic catarrh of the common bile duct, and asked the members of the society to suggest a line of treatment. A discussion followed, in which all members present joined, and a gen-



eral line of treatment in such cases was presented and outlined.

Dr. E. M. Allee presented a case of chronic interstitial nephritis of six years' duration, in which a general anasarca was present. The ordinary remedies failed to diminish the œdema, but the case had been greatly benefited by the use of a mixture composed of oxydendron arboreum, sambucus canadensis, and urogenia scilla. A general discussion followed, the disease and its treatment being the subjects, and Dr. Allee was asked to report on the case at the next meeting.

The committee on fees, not being ready to report, was given until the next meeting to hand in their report.

The name of Dr. W. H. Reynolds, of Lupus, was presented by Dr. Cochran for membership in the Cooper County Medical Society, and, upon the entire vote of members present, Dr. Reynolds was received as a member.

There being no further business, the society adjourned to meet Tuesday, November 7th.

JOHN R. LIONBERGER, Sec'y.

#### JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robert T. Sloan, President.

Dr. Max Goldman, Secretary.

The Jackson County Medical Society met in regular session Thursday evening, September 28th, 1905. The meeting was well attended and an excellent program was rendered.

Dr. Howard Hill read a paper entitled "The Repair of the Female Perinæum, with Special Reference to its Surgical Anatomy," and Dr. J. P. Kanoky presented a case of "Eczema Seborrhœicum."

Dr. Hill exhibited a number of interesting sketches of the anatomical structure of the female perinæum, as well as of the technic practiced by him in the repair of recent and long-standing lacerations. The procedure was minutely and instructively described, and proved to be a simplified method of separating the mucous membrane and scar tissue over an area included between the retracted ends of the torn levator ani muscle chiefly, thus exposing them, then bringing up these ends by means of two or three strong sutures, and approximating them carefully; the flap that remains is then disposed of in any manner that may suggest itself as most feasible in each individual case. The perinæum, it is claimed by Dr. Hill, is thus actually restored, hence its function is again properly performed and reflex symptoms disappear.

The paper was discussed by Dr. N. O. Harrelson, who, at the same time, presented a resume of a method of repairing the perinæum adopted by him and to some extent different from that of Dr. Hill. He stated that in many old lacerations it may be impossible to find by dissection the ends of the levator ani because of atrophy of the muscle, and therefore his custom in all cases is to include between the sutures as much denuded tissue from each side as possible, thus lifting up the retracted perinæal structures, which by their union give a firm wedge of tissue in place of the former relaxed outlet. The new perinæal body performs the function of the original one; it matters little whether it be muscular or fascial.

Others taking part in the discussion

were: Drs. A. E. Hertzler, J. C. Martin, J. M. Frankenburger, Maggie McCrea, F. H. Brunig, E. E. Hubbard, W. H. Coffey, R. E. Castelow, C. B. Hardin and Fannie J. Henry. Dr. Hill closed the discussion.

An unusually interesting case of "Eczema Soborrhoeicum," of slightly over two years' standing, in a boy five years of age, was exhibited by Dr. J. P. Kanoky. The remarkable features of the case were several: (1) It began on the right and posterior surface of the trunk over two years ago; (2) the head became involved one year later; (3) lesion covered an extensive area, including the entire scalp, the forehead, the eyebrows, the left side of the face close to the median line, the middle surface of the chest in front and behind, and the palmar surface of both hands; (4) even in the early stages the eyes were attacked by a phlyctenular conjunctivitis, causing pain and photophobia; (5) the general condition of the child is comparatively good; (6) the disease has responded unusually well to treatment by sulphur and resorcin locally and general tonics; (7) the case presents almost every phase of the condition known and described as eczema soborrhoeicum.

Dr. Kanoky presented beautifully colored photographs of the original lesions of the case, and in treating of same dwelt especially upon its etiology and differential diagnosis, considering particularly psoriasis, pityriasis rosea, and syphilis.

Dr. Halsey M. Lyle opened the discussion by considering at length the differential diagnosis from a number of similar lesions; excluding, however, all of them by recalling the

characteristic signs of each of the diseases with which the case presented might be confused. Among those mentioned by Dr. Lyle were tinea favosa, circinata, trichophytina, pityriasis rosea, and psoriasis.

Others taking part in the discussion were Drs. G. W. Davis, William Frick, Franklin E. Murphy and Jos. Lichtenberg. Dr. Kanoky closed the discussion.

Dr. Lichtenberg reported hurriedly a case of meningeal infection occurring in a four-year-old boy who was injured by falling on an ordinary atomizer, the tube entering the ear, causing considerable pain, of which, however, the child was soon relieved, and on the next day seemed entirely well, and without any suggestive signs or symptoms. The following day there developed a typical cerebral meningitis, and the patient died in twenty-four hours. At the autopsy there was found a fracture at the base of the skull, and a lesion at the temporo-sphenoidal lobe of the brain, indicating that the instrument upon which the child fell had entered and infected the meningeal and cerebral tissues.

Owing to the late hour the case reported was not discussed.

MAX GOLDMAN, M. D.,  
Secretary.

#### HOLT COUNTY MEDICAL SOCIETY.

Dr. C. L. Evans, President.  
Dr. J. F. Chandler, Secretary.

The Holt County Medical Society met in regular session at Bigelow on October 5th. Members present: Drs. F. E. Bullock, J. F. Chandler, T. O. Davis, C. L. Evans, M. S. Gray, J. M.



Davis, F. E. Hogan, E. Kaltenbach, E. M. Miller, B. T. Quigley and Ira Williams.

After transacting the other business of the society, the scientific part of the program (consisting of three papers) was taken up.

The first paper, "Puerperal Infection," by Dr. Evans, from its many phases, brought forth much discussion, as did Dr. E. M. Miller's paper on "Gall Stones." Dr. Miller recently returned from Chicago, where he had taken post-graduate work and had witnessed many operations for removal of gall stones.

Dr. Quigley's subject was "Gonorrhoea." The doctor presented the subject in a most interesting manner, not only from a scientific standpoint, but from a business standpoint as well.

The next meeting will be held at Maitland, on the first Thursday in January, 1906.

J. F. CHANDLER, Reporter.

#### LACLEDE COUNTY MEDICAL SOCIETY.

Dr. J. M. Billings, President.

Dr. J. A. McComb, Secretary.

Laclede County Medical Society met in Commercial Club rooms at Lebanon, Mo., October 9, 1905. Dr. Billings, president, in the chair.

There were present Drs. Billings, McComb, Perkins, Pinckard, Pritchett, Herbert and J. A. McComb of Lebanon. Drs. Lockwood and Jacobs of Conway; Drs. Carleton, Pool and Monday of Stoutland, Dr. Lindsay of Orla, Dr. Atchley, of Atchley and Dr. Sumner of Niangua.

Minutes of last meeting read, corrected and approved.

Dr. Sumner of Niangua read a paper on "Treatment of Incipient Tuberculosis of the Lung." The paper was well received and the writer very highly complimented.

The discussion of the paper showed a lack of confidence on the part of the ordinary physician, in his ability to do for the consumptive all that the late writers have indicated might and ought to be done.

On motion it was requested that each member of the society report the names of the tubercular cases under his treatment, so that the society may then offer some useful advice to the patient and the community.

Following this there were reports and discussion of unusual obstetrical cases. Drs. Pinckard and Lindsay were appointed to read papers on the subject of pneumonia at the next regular meeting, and Drs. Pritchett and Herbert were appointed to open the discussion on the papers.

At the January meeting there will be an afternoon and evening session.

On motion, adjourned till the second Monday in January, 1906.

J. A. McComb, Repore r.

#### LIVINGSTON COUNTY MEDICAL SOCIETY.

Dr. David Gordon, President.

Dr. J. F. Cherrington, Secretary.

Livingston County Medical Society met in regular session at Chillicothe on October 11th, the president, Dr. Gordon in the chair. After routine business had been disposed of, a resolution was introduced to change the time of meeting from the second Wednesday quarterly to the second Wednesday monthly. The resolution



was laid over for action at the January meeting.

Dr. Cherrington gave a talk on "Juglandin," describing its derivation, dosage, indications and therapeutic action. The subject was discussed generally by the members.

Dr. L. F. Carlyle of Wheeling presented a patient suffering from pleuritic and splenic difficulties and invited the doctors to examine the case, make a diagnosis and suggest an outline of treatment.

The Chillicothe members of the society are considering the feasibility of establishing a society in Chillicothe to be composed of the Chillicothe physicians and conducted upon the plan of a post-graduate school. October 19th was named as the date for holding the first meeting looking toward the consummation of this object.

J. F. CHERRINGTON, Secretary.

#### MACON COUNTY MEDICAL SOCIETY.

Dr. W. H. Miller, President.

Dr. C. W. Reagan, Secretary.

Macon County Medical Society convened in the office of Dr. C. W. Reagan, on August 8th, Dr. F. W. Allen, of Barryville, in the chair. Members present: L. M. Thompson, B. J. Milam, E. S. Smith, A. B. Miller, Macon; S. L. Burton, Caseyville; F. W. Allen, Barryville; B. F. Bunch, Bloomington; C. W. Smith, Keota; L. O. Mason, Bevier. After the routine business had been transacted, Dr. S. Burton reported a case of appendicitis terminating in recovery by spontaneous rupture in the bowel after one month of illness.

After the discussion of this case, the society adjourned until the afternoon.

At the afternoon session Dr. Miller reported a case of obstruction of the bowels complicating an attack of cholera morbus. Operation was performed and the patient made a good recovery. The report of this case is published in full below.

Dr. Miller also reported a case of obstruction of the bowels coming on forty-eight hours after confinement. The patient declined operative procedures for relief and death resulted on the third day. The discussion on these reports was very interesting and participated in by all the members.

Dr. E. S. Smith reported a case of Friedreich's ataxia. Dr. Smith had anticipated presenting the patient to the society, but this was made impossible on account of an acute attack of colitis.

Dr. Smith presented a patient, a coal miner who had received an injury over the external condyle of the humerus, which was followed by impairment of movement of the arm and partial paralysis of the muscles of the forearm.

Resolutions of sympathy were wired to the president, Dr. W. H. Miller, who was sick at Boulder, Colo.

On motion, adjourned.

F. W. ALLEN, Secretary.

#### MEETING OF SEPTEMBER 12TH.

The meeting was called to order by the president, Dr. Miller. Members present: W. H. Miller, B. J. Milam, E. S. Smith, L. M. Thompson, E. C. Salyer, G. F. Brewington, L. O. Mason, J. P. Foster, W. V. Yates, F. W. Allen, C. W. Reagan, B. F.

Bunch, W. A. Welch, J. N. Southern, A. B. Miller, F. L. Trippier and L. O. Newton.

On invitation of Dr. Smith the morning session was held at the County Court House, where a number of interesting cases were presented, among them the case of Friedreich's ataxia reported at the last meeting. At the afternoon session Dr. Milam reported a case of rupture of the penis from direct violence. Dr. T. O. Mason presented a case of hypertrophy of the spleen due to chronic malaria and gave an outline of the treatment he had instituted.

Dr. J. N. Southern presented a patient, a young man, who for several years had been afflicted with petimal and now seems to be developing symptoms of grand-mal.

These reports and cases were very generally discussed by the members present and the meeting altogether was most interesting and instructive.

Dr. Miller's paper was as follows:

#### A CASE OF OBSTRUCTION OF BOWELS COMPLICATING CHOLERA MORBUS.

Miss L—, aged twenty-three, had an attack of peritonitis two years ago. During the night of July 8, 1905, she had an attack of cholera morbus. Vomited and purged all night, bowels moving six times; large, offensive, watery stools. On the morning of the 9th during a severe attack of vomiting, the patient was seized with colicky pain near and to the right of the umbilicus, after which the diarrhoea ceased, but the pain and vomiting continued. Temperature 98°, no distension. Morphia

was given hypodermically and mild intestinal antiseptics, gave her a fairly comfortable day. In the evening intestinal and antiseptics with anodynes were used and she passed a comfortable night. On the morning of the 10th vomiting and colicky pain continued. The vomiting appeared to follow peristalsis. There was considerable distension in the region of the umbilicus and seemed to be confined to the small intestines.

Obstruction being suspected, high enemas were given but seemed to show a negative result and only aggravated the pain and vomiting. The patient located the seat of obstruction with remarkable accuracy. Operation was decided upon, but was delayed twenty-four hours until the patient's mother could arrive. Temperature 98.5°, pulse 90. Diagnosis was based on the sudden cessation of the diarrhoea, colicky pain followed each time by vomiting and distension of the small bowel without fever.

At 10:30 on the morning of the 11th, assisted by Drs. W. H. Miller, L. M. Thompson and C. W. Reagan, the abdomen was opened by making a four-inch median incision through the right rectus muscle. On opening the peritoneum about three pints of very bloody serum escaped. The small bowel presented in the wound enormously distended (as large as the colon) and its vessels were much engorged. The bowel was very dark in color, dry and granular in appearance and covered here and there with dark spots that looked almost gangrenous. Recent adhesions had formed, involving about five feet of the small intestine bowel; the obstruction was occasioned by an old band of ad-



hesions under which a loop of intestines had slipped in the act of vomiting. After liberating the bowel it was found so enormously distended that after reasonable effort to return it had failed it was thought wise to empty the bowel before returning it. A half inch incision was made in the bowel and a large quantity of foul smelling fluid withdrawn. The wound in the intestine was sutured after Halstead's method, the gut carefully cleansed and returned. The usual toilet of the peritoneum was made, omentum replaced and the abdomen closed by three layers of sutures. Temperature at 6 P. M., 99.5° F., pulse 120, strong and regular; no vomiting. On the 12th the temperature was normal, pulse 100. The afternoon of the 12th the cholera morbus seemed to have disappeared, the bowels moving three times, and the patient begged for food. Her temperature never was above normal after the first day and her recovery was rapid and uneventful. July 24th, two weeks after the operation the patient was dismissed.

Some features of this case are worthy of note. We almost waited too long for the arrival of the relatives. Extensive adhesions had formed and yet there had been no fever or other inflammatory symptoms. The incision into the gut and the entering of the gut not only relieved the tension of the enormously distended bowel but it lessened shock, removed danger of rupture and the shock that would have ensued from the presence and pressure of the distended viscus had it been returned in that condition. The patient was so unusually well and comfortable after the operation that we thought that the thorough empty-

ing of the bowel contributed to this end.

### RALLS COUNTY MEDICAL SOCIETY.

Dr. W. S. Harwood, President.

Dr. T. J. Downing, Secretary.

Ralls County Medical Society met in regular session at Center on October 12th. By invitation of the society, Dr. N. A. Foster, a very old and now retired physician, resident of Center, occupied the chair. After routine business had been disposed of, the officers for the ensuing year were elected, as follows: President, Dr. W. S. Harwood, of Rensselaer; secretary, Dr. T. J. Downing, of New London.

The scientific program included a paper, entitled "Diphtheria," by Dr. W. S. Hendrix, and for general discussion the subject was "Digitalis." Dr. Hendrix's paper brought forth an interesting discussion, and the discussion on "Digitalis" was general, and participated in by all the members.

T. J. DOWNING, Secretary.

### WAYNE COUNTY MEDICAL SOCIETY.

Dr. J. P. Sebastian, President.

Dr. R. J. Owens, Secretary.

Wayne County Medical Society met in regular session at Mill Spring on September 29th. In the absence of the president, Dr. Bailey, of Leeper, was chosen to preside over the meeting. The minutes of the last meeting were read and approved. Dr. Owens, presented a patient, a child twelve years old, who had fallen on a stone in December of last year. Following the injury there was an



acute inflammatory process, involving the periosteum. Dr. Owens saw the patient about ten days after the injury. The child was anesthetized and an incision was made over the most prominent point and extended well down on the bone. No pus being found, the wound was tightly packed with iodoform gauze. On the following day the dressing was removed, and a little pus was seen. Instructions were given the parents for dressing the wound, and the case was dismissed. The wound healed, suppuration ceased, but a thickening of the bone was noticeable. Some months later a sinus opened, which now extends into the tibia. The case was examined by the members, and the opinion expressed that an operation should be performed.

Dr. Owens reported a case. A woman ten days after confinement was seized with a chill and high fever. When first seen by the doctor the pulse registered 120 beats, temperature 104.5 degrees F.; cheeks were flushed, and respiration very rapid. Septic infection was suspected, and the uterus examined and found full of pus. The uterus was irrigated and swabbed with iodine and carbolic acid mixture and a gauze drain placed in position. The patient improved under this treatment, but is still under observation.

Dr. Toney reported a case of a child who was seized with chills and fever, followed by paralysis of one arm. Antimalarial treatment was instituted, together with salicylate of soda. Under this treatment the child made a rapid and complete recovery.

Dr. Bailey expressed the opinion that the paralysis was caused by neu-

ritis. Dr. Toney thought it was of central origin, probably caused by serous effusion, which was quickly absorbed.

Dr. Toney reported a case of non-union of a fracture of the femur of twenty months' standing in a woman eighty years of age. Dr. Gilmer in the discussion, thought a resection was inadvisable on account of the age of the patient. Dr. Toney thought an operation would have a favorable outcome.

At a previous meeting Dr. S. A. Bates promised to prepare a paper on intussusception and read it at this meeting. He said, however, that he had been unable to fulfill his promise because of the press of other business, and would have the paper ready for a subsequent meeting. The society took up the subject for general discussion, during the course of which Dr. Bates said he believed intussusception was much more common than is generally supposed, and thought it frequently occurred in a complication of other diseases. He stated that he had seen sixty-five cases, and there had been but one death in this number. Dr. Toney and others thought it probable there had been an error in diagnosis in some of the cases which Dr. Bates classed as intussusception. Dr. Bates said the treatment is simple, his method being to give copious enemias and manipulate the abdomen to force the gut back, and confine the patient to a strictly liquid diet. Dr. Bates did not say that he had ever operated on a case.

Pneumonia and diseases of children was the subject selected for discussion at the next meeting.

Piedmont was chosen as the place

for the next meeting, which will be held on November 10th.

R. J. OWENS, Secretary.

### WORTH COUNTY MEDICAL SOCIETY.

Dr. O. P. M. Mills, President.

Dr. J. K. Phipps, Secretary.

The Worth County Medical Society met at Grant City on September 20th, with Dr. O. P. M. Mills, the president, in the chair.

Minutes of previous meetings were read and approved.

Dr. H. P. Mills of Sheridan, read a most interesting paper on "Prophylaxis and Early Diagnosis of Tuberculosis."

Dr. W. A. Robertson of Allendale, read a paper on "Dysentery," in which he gave in detail the manner in which he had treated the fifty cases that came under his observation during the past summer. Both of these papers were freely discussed in an informal way by all the members present.

The next regular meeting will be held at Grant City on the second Wednesday in October.

J. K. PHIPPS, Secretary.

### COLE COUNTY MEDICAL SOCIETY.

Dr. J. P. North, President.

Dr. G. Ettmueller, Secretary.

At the regular quarterly meeting of the Cole County Medical Society, held October 12th, Dr. Thorpe reported about the meetings of the Missouri Medical Association and the National Association, both of which he attended. Three new members were enrolled: Dr. J. A. Hill, Dr.

McAlister of Jefferson City, and Dr. Yates of Wardsville.

Resolutions were adopted extending the sympathy of the society to Dr. J. B. Martin, Sr., of Russellville, a member of the society, on account of the death of Dr. J. B. Martin, Jr., also a member.

G. ETTMUELLER, Secretary.

### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.

Dr. H. Will Elders, Secretary.

Jefferson County Medical Society met in regular session on September 26th, the president, Dr. W. H. Farrar, in the chair. A large number of members were present. Several very interesting papers were read. All the members took part in the discussion. H. WILL ELDERS, Secretary.

### KNOX COUNTY MEDICAL SOCIETY.

The regular meeting of Knox County Medical Society was held on October 2d. In the absence of the president, Dr. Myers occupied the chair. The minutes of the previous meeting were read and approved.

Dr. Jurgens read a paper on the "Pathology of Typhoid Fever." Discussion by Drs. Brown, Northcutt and St. John.

Dr. St. John read a paper on the "Disorders of the Menopause." Dr. Brown and Dr. Northcutt discussed the paper very freely.

Dr. J. R. Northcutt read a paper on "Eclampsia," which was very interesting and brought forth considerable discussion from Drs. Brown, St. John, Leeman and Jurgens.

The following resolution was adopted, extending the sympathy of the members to Dr. L. S. Brown on the loss of his eldest son.

*"Resolved,* That we, the members of the Knox County Medical Association, extend to our honored president, Dr. L. S. Brown, our sincere sympathy

in the death of his son, Dr. William Brown, of Chicago, and that a copy of these resolutions be spread upon the records of this society."

A committee was appointed to assign subjects for papers to be read at the next meeting and appoint essayists. H. J. JURGENS, Secretary.

## NEWS ITEMS.

Andrew County Medical Society is making special efforts to have an unusually interesting meeting at the next session. The secretary, Dr. C. O. Jeffries, promises to forward a complete report of this meeting.

"Dr." J. T. Davis of Harrisonville, Cass county, was arrested at Pleasant Hill on October 3d for practicing medicine without a license. He was unable to pay the fine of fifty dollars and costs and is now serving his sentence in the county jail.

"Dr." A. S. McLeary, a "rectal specialist" of Kansas City, was arrested some weeks ago charged with illegal practice of medicine. His trial has been twice continued and is now set for the November term of court.

Dr. W. S. Harwood, of Rensselaer, was elected president of Ralls County Medical Society at the last meeting.

Dr. R. S. Holman, formerly secretary of Cooper County Medical Society, Boonville, has removed to St. Louis, where he has entered into active practice. He is located at 3951 Delmar avenue.

Dr. Harold W. Jones, of St. Louis, was recently appointed surgeon in the army service and is now at the army medical school, Washington, D. C.

Dr. John R. Lionberger, of Boonville, has been elected secretary of Cooper County Medical Society.

Dr. W. L. Gillmor has removed from Winona to Kansas City. He is now located at 300 Westport avenue in that city.

The Harrison County Medical Society will meet at Bethany on November 14th. An extensive program is being arranged for this meeting. Several interesting papers have been promised and a number of cases will be presented. The members are looking forward to this meeting with much interest, and a report will be forwarded to the JOURNAL for publication in the December number.

At the annual meeting of the Gasconade-Maries-Osage County Medical Society, held at Bland on October 26th, the following programme was carried out:

Clinic, Dr. W. R. Ferrell.



Clinic, Dr. J. D. Seba.  
 Appendicitis, Dr. W. S. Allee.  
 Pneumonia, Dr. J. J. Ferrell.  
 The Menopause, Dr. J. Englebrecht.  
 Physiological Action of the Typhoid  
 Gland, Dr. Jno. D. Seba.

Remarks on the Insidiousness of  
 Typhoid Fever, Dr. J. W. Niewig.

A full report of the meeting will be  
 published in the next issue of the  
 JOURNAL.

The United States Civil Service  
 Commission announces an examina-  
 tion on November 22, 1905, at the  
 places mentioned below, to secure  
 eligibles from which to make certifi-  
 cation to fill a vacancy in the position  
 of physician (male), at \$1,000 per  
 annum, San Juan Indian Agency, N.  
 Mex.; another at \$900 per annum, at  
 Fort Bidwell, Cal., and similar vacan-  
 cies as they may occur in the Indian  
 service.

As the commission has experienced  
 considerable difficulty in securing  
 eligibles for this position, but five  
 having been secured as the result of  
 the examination held on September  
 13, 1905, qualified persons are urged  
 to enter this examination.

The examination will consist of the  
 subjects mentioned below, weighted  
 as indicated:

Subjects.	Weights.
1. Letter-writing (the subject matter on a topic relative to the practice of medicine) . . . . .	5
2. Anatomy and physiology (general questions on anatomy and physiology, and histologic or minute anatomy) . . . . .	15
3. Chemistry, materia medica, and therapeutics (elementary questions in inorganic and or-	

ganic chemistry; the physiologic  
 action and therapeutic uses and  
 doses of drugs) . . . . . 10

4. Surgery and surgical path-  
 ology (general surgery, surgical  
 diagnosis; the pathology of sur-  
 gical diseases) . . . . . 20

5. General pathology and prac-  
 tice (the symptomatology, etiolo-  
 gy, diagnosis, pathology and  
 treatment of disease) . . . . . 25

6. Bacteriology and hygiene  
 (bacteriologic methods, especial-  
 ly those relating to diagnosis;  
 the application of hygienic meth-  
 ods in prophylaxis and treat-  
 ment) . . . . . 10

7. Obstetrics and gynecology  
 (the general practice of obstet-  
 rics; diseases of women, their  
 pathology, diagnosis, symptoms  
 and treatment, medical and sur-  
 gical) . . . . . 15

Total . . . . . 100

Seven hours will be allowed for this  
 examination. Age limit, 25 to 55  
 years on the date of the examination.

This examination is open to all male  
 citizens of the United States who com-  
 ply with the requirements.

Applicants should at once apply  
 either to the United States Civil Ser-  
 vice Commission, Washington, D. C.,  
 or to the secretary of the board of ex-  
 aminers at any of the places mentioned  
 below, for application form 1312. No  
 application will be accepted unless  
 properly executed and filed with the  
 commission at Washington. In ap-  
 plying for this examination the exact  
 title, "Physician (male) Indian Ser-  
 vice," should be used in the applica-  
 tion.

As examination papers are shipped

direct from the commission to the places of examination, it is necessary that applications be received in ample time to arrange for the examination desired at the place indicated by the applicant. The commission will, therefore, arrange to examine any applicant whose application is received in time to permit the shipment of the necessary papers.

Application blanks may be secured by applying at the postoffice in the following places: Jefferson City, Kansas City, Kirksville, Springfield, St. Louis.

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The physicians of Chillicothe, Mo., held a meeting on October 19th, and organized a medical society, to be known as the "Chillicothe Post Graduate Medical Society."

The purposes of the society are set forth in Article II of the constitution and by-laws for county societies prepared by the American Medical Association, and practically the same laws, with some additions or eliminations, to govern this body.

Meetings will be held on the first and third Thursdays of each month at 8 P. M. from April to October, and at 7:30 P. M. from October to April.

A program will be made up by the committee for the entire year. Each

member will decide upon what branch or branches he will lecture on during the year, and the committee will assign the date of such lectures and arrange the time allowed to each subject and the "quiz" or discussion thereon.

In this way it is hoped to create not only a friendly interest in advanced subjects of the profession, but to build up the county society and establish it forever.

The following officers were chosen for the ensuing year: President, J. F. Cherrington; vice-president, B. M. Stevens; secretary and treasurer, H. M. Grace.

The next meeting of the society will be November 2d.

A movement was also placed on foot to form a hospital association and build and maintain a non-sectarian charitable hospital in Chillicothe, the funds to be raised by the sale of 5,000 shares of stock at \$10.00 per share, to be fully paid, non-assessable and never profit sharing.

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The unusually heavy rains and very bad roads have combined to prevent the members of Platte County Medical Society from holding a meeting since August. It is hoped the November meeting will be well attended.

## BOOK REVIEWS.

A Compend of Histology. By Henry Erdmann Radasch, M. S., M. D., Associate in Histology and Embryology in the Jefferson Medical College; formerly Fellow in Chemistry in the University of Iowa (1895-6); formerly Lecturer on

Chemistry and Director of the Chemical Laboratories in the College of Physicians and Surgeons, Keokuk, Iowa (1897-8). With 98 illustrations. Philadelphia: P. Blakiston's Son & Co. \$1.00.

This volume occupies a place inter-



mediate between the existing compends and text-books. The matter is clear, concise, and up to date. Embryology has been touched upon only as it bears directly upon histology. The chapter on technic is as complete as necessary for routine work. Connective tissues have been grouped in a simple, characteristic manner, and the blood cells have been arranged in a simple and readily-comprehended form. The chapter on the placenta and umbilical cord has been written in detail. The work is well illustrated.

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Transactions of the Iowa State Medical Society, Vol. xxiii., Fifty-third Annual Session, 1905. Des Moines, Iowa.

This twenty-third volume contains a full report of the transactions and programs rendered at the Fifty-third Annual Session of the State Association. The papers read are of especial interest, and give evidence of the intensely original, practical character of the western practitioner. This volume should be of interest to every practitioner in the state of Iowa on account of the up-to-date papers and discussion of the same.

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Manual of Operative Surgery. By John Fairbairn Binnie, A. M., C. M. (Aberdeen), Professor of Surgery, Kansas State University, Kansas City; Fellow of the American Surgical Association; Member De La Societe Internationale De Chirurgie. Second edition, revised and enlarged, with 567 illustrations, a number of which are printed in colors. \$3.00. Philadelphia: P. Blakiston's Son & Co.

The approval of this Manual of Operative Surgery by the profession is

shown by the fact that in six months the entire first edition was sold, necessitating a revision and a second edition within a period of nine months. This second edition has been carefully revised. A description of the operations on the mastoid has been added. Notice has been taken of recent advances in cerebral localization. Short articles on the duodenum and on tuberculous peritonitis have been written. Other sections have been revised so as to keep abreast with the advance of surgery. This second revision makes this Manual of Operative Surgery one of the most complete ever given to the profession and is worthy the commendation it has received.

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The Principles and Practice of Medicine, Designed for the Use of Practitioners and Students of Medicine. By William Osler, M. D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Honorary Professor of Medicine, Johns Hopkins University, Baltimore, etc. Sixth edition thoroughly revised from new plates. New York and London: D. Appleton & Co.

In this new sixth edition the entire work has been thoroughly revised, many chapters have been rewritten and much new matter has been added. Special attention has been given to new points in treatment. So many alterations have been made that it is in many respects a new book. It is a reflex of current knowledge in the symptomatology and treatment of disease, based upon the literature and upon the author's experience in the medical clinic of the Johns Hopkins Hospital. The warm support of the



general practitioner throughout the country shows this work to be probably the most popular as well as the most helpful to student and physician which has ever been given to the profession.

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The *Diagnostics of Internal Medicine*, a Clinical Treatise upon the Recognized Principles of Medical Diagnosis. Prepared for the use of Students and Practitioners of Medicine. By Glentworth Reeve Butler, Sc.D., M.D., Chief of the Second Medical Division, Methodist Episcopal Hospital; Attending Physician in the Brooklyn Hospital; Consulting Physician to the Bushwick Central Hospital; Fellow of the New York Academy of Medicine; Fellow of the Society of Science, Letters and Art (London), etc. With five colored plates and two hundred and eighty-eight illustrations and charts in the text. Second revised edition. \$6.00. New York and London: D. Appleton & Co.

Although this work has been before the profession but four years its genuine worth is evidenced by the fact that more than fifty thousand copies have been printed. The present edition is up-to-date. About one hundred more pages have been added, together with forty additional illustrations. To keep pace with the progress of medical science many articles have been rewritten and one entire new section on diseases of the mind has been added. No change with arrangement or classification has been made and the work still remains pre-eminently a clinical work, dividing itself naturally into two parts: first, a study of symptoms and their

indication; second, a study of diseases and their characteristics. By the choice of material and method of arrangement all that is essential for making a diagnosis is contained in this volume. Everything has been subordinated to facilitate in a practical way the making of a thorough examination and correct diagnosis.

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*International Clinics*, Volume III, Fifteenth Series. \$2.00. Philadelphia: J. B. Lippincott & Co.

This third volume of the *International Clinics* is complete and up to date. It contains the results of the research work and practical experience of the best clinicians in this country and abroad. The article on Radiotherapy is extremely interesting and practical. The Symptomatic Treatment of Tuberculosis by Noble T. Barnes, M. D., is very instructive. The article on Serumtherapy by John W. Wainwright, M. D., is especially interesting in these days of antitoxins. This article gives the *modus operandi* and the results obtained in its use in the various contagious diseases. The section on medicine contains articles on Mucous Colic, Injuries and Lesions following the toxic use of Alcohol, and Addison's Disease, by McPhedran, Crothers, Robinson, Wells and Michels. The section on surgery contains the following articles: Fractures of the Patella, Paraffin Injections by the "Cold Process," Ethyl Chloride, and the Additional Diagnosis of Tumors of the Right Hypochondrium, by Wight, Braekhaert, Luke and Tuffier. Other interesting articles are: Acute Anterior Poliomyelitis, with special references to the stage of invasion by

Sanger Brown; Syphilitic Necrosis of the Frontal Bone by Ohmann-Dumesnil; Notes on Treatment of Hay-fever and Asthma, by Chas. H. Knight; Gonorrhoea and Conjunctivitis, by Wm. Geo. Sym, and Cirrhosis of the Liver by Richard Kretz.

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READY IN NOVEMBER.

Differential Diagnosis and Treatment of Disease by Augustus Caille,

Fellow of the New York Academy of Medicine; Member and ex-President of the American Pediatric Society; Professor of Diseases of Children, New York Post-Graduate Medical School and Hospital; Visiting Physician to the New York Post-Graduate and German Hospitals; Consulting Physician to Isabella Home and Hospital, etc. D. Appleton & Company, New York, Publishers.

# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	G. W. Lott	Ulesboro	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Lamar.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas W Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	R. K. Dodge	Palo	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	J. K. Porterfield, Jr.	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Chariton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Plattsburg.
Cole	J. P. North	Jefferson City	G. E. Etmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	J. R. Lionberger	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	N. E. Sutton	Trenton	W. H. Winningham	Trenton.
Harrison	A. H. Vandvert	Bethany	W. H. Wiley	Ridgeway.
Henry	W. M. Shankland	Clinton	F. M. Douglas	Clinton.
Holt	C. L. Evans	Oregon	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	L. S. Brown	Edina	Henry J. Jurgen	Edina.
Laclede	J. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	W. H. Miller	Macon	C. W. Reagan	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodner	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmore	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman	Ulman	G. D. Walker	Eldon.
Mississippi	A. J. Martin	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	J. W. Lamson	Neosho	Horace Bowers	Neosho.
Nodaway	F. R. Anthony	Maryville	L. E. Dean	Maryville.
Pemiscot	D. B. Crowe	Caruthersville	J. G. Luten	Caruthersville.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
Phelps	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Orrick	Crocker.
Putnam	C. H. Carver	Hartford	T. A. Townsend	Unionville.
Ralls	W. S. Harwood	Rensselaer	T. J. Downing	New London.
Randolph	G. O. Cuppaide	Moberly	W. M. Dickerson	Renick.
Ray	Chas. B. Shotwell	Richmond	L. D. Greene	Richmond.
Reynolds	J. M. Lowery	Centerville	T. W. Chilton	Corridon.
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	E. K. Stumberg	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	H. C. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	J. C. Kessenger	Milan	J. S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City.
Washington	J. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	J. P. Sebastian	Patterson	R. J. Owens	Mill Spring.
Worth	O. H. P. Mills	Grant City	J. K. Phipps	Grant City.



# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Monthly. Second Tuesday.
Carter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly. First Tuesday.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday, April, July, October, January.
Daviess .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. Second Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Semi-Annual. Fourth Thursday, April and October.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Harrison .....	
Henry .....	Quarterly. Second Wednesday, Dec., March, June, Sept.
Holt .....	Quarterly. First Thursday, January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Quarterly. Second Monday, Jan., April, July, Oct.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Quarterly. Second Wednesday, Jan., April, July, Oct.
Macon .....	Monthly. Second Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Moniteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Quarterly. November, February, May, August.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.
Worth .....	Monthly. Second Wednesday.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.

President-Elect: WM. J. MAYO, Rochester, Minn.

President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

President: D. C. GORE, Marshall, Mo.

Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, California; F. A. GLASGOW, St. Louis; T. F.

LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

## COMMITTEES.

### Committee on Scientific Work.

C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.

### Publication Committee.

C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes; W. B. Dorsett.

### Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, Lewis.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Liberty. Counties: Clay, Ray, Platte, Clinton, Caldwell, DeKalb, Gentry, Harrison, Worth, Daviess.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: Bollinger, Scott, Madison, Cape Girardeau.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Hickory, Cooper.

Fourteenth District.—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Dade, Barton, Cedar, Vernon.

Sixteenth District.—R. L. Johnson, Rolla. Counties: Dallas, Crawford, Phelps, Pulaski, Laclede, Dent.

Seventeenth District.—J. E. Tefft, Springfield. Counties: Greene, Christian, Stone, Barry, Lawrence, Webster, Polk, Taney.

Eighteenth District.—H. C. Shuttee, West Plains. Counties: Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

\*Counties in black type are unorganized.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION.

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VOLUME II.

DECEMBER.

NUMBER 6

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## ORIGINAL ARTICLES.

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### SOME UNRECOGNIZED RESPONSIBILITIES OF PRESS AND STATE IN CONSERVING HEALTH.\*

BY BRANSFORD LEWIS, M. D., St. Louis.

On the medical profession devolves, by general consent, the task of looking after the hygienic welfare of the people. That it has unhesitatingly accepted that task, and conscientiously disposed of it to the best of its ability, appears from medical history—from its records of devotion to the abatement of epidemics, to the prophylaxis of disease, the lessening of its severity and the shortening of its course. Ever incident to the work of the medical profession has been self-sacrifice and philanthropy. The more broadly the laws of self-conservation are taught the people, the less work the profession gets from the people. But does that thought lead to any hesitancy on the part of the profession in its pristine endeavor to lessen suffering—either actual or possible? Not a whit.

The motives of such professional endeavor may occasionally be put to question; its reasons and deductions

may occasionally be side-tracked into error, requiring revision or retracing of steps—but, like the mills of the gods that slowly grind, the ceaseless study and work of the profession bears fruit; progress is sure, and step by step, mile-stones of discovery and accomplishment are passed that, in the vistas of the past, seemed but as filmy dreams. What is but a fancy of today becomes in time a consummation devoutly wished.

There are practical problems now facing us that equal in importance any the profession has yet solved. Some are so familiar to us that they seem the natural order of things, and are scarce thought of on that account. Some, thus overlooked, are far-reaching in their influences, fearful in their consequences, often intimate and personal in their contact.

Among those that deserve the attention of the medical body is that of quack medical advertising in newspapers and magazines.

It is the general policy of the

\* Read before the St. Louis Medical Society, October 28, 1905.



state to protect its people—and this, whether the people individually wish to be protected or not. If a burglar breaks into a citizen's home and steals, he is pursued, prosecuted and imprisoned, as a result of the united endeavor of both the citizen and the state, the newspapers meantime lending their assistance in aid of the procedure.

If a confiding denizen of the country visits the city and incidentally purchases a gold brick made of brass, he may not be active in the publication of the event or the prosecution of the evil-doer, preferring retirement and quiet introspection; nevertheless, the state is just as zealous in its activity in this instance as in the other, in its endeavor to apprehend and punish the malefactor; and it impresses the retiring citizen, if it can, into the service of prosecution. The newspapers assume no indifferent attitude toward the culprit and his retribution. They cry "stop thief" as loudly as they are able, even to the embarrassment, perhaps, of the mortified purchaser of the gold brick.

The newspapers are active partisans of morality and justice in such cases; they cry out in wild acclaim against the bunco-steerer, the boodler, the bigamist, the burglar and the swindler—save when that swindler assumes the relation of a regular medical advertiser. Then they not only do not proclaim against him, but are active contributors to the making of his fortune. They are, indeed, almost his sole reliance, the medium through which he keeps in touch with his prospective victims, the innocent public. No matter how villainous and false the concoction of such an adver-

tiser's mind and pen may be, it is accepted by the newspapers, is set up and presented in as alluring a style as possible, and in prominent position. The quack's thrilling word-paintings of imaginary diseases and symptoms are only exceeded by the marvelous efficacy of the remedy which he brings forward (at one dollar a bottle) to combat them—the remedy that never fails; that he alone knows or has invented; that has reclaimed thousands of afflicted after they had been given up by their friends and regular medical attendants.

The truth of all this absurd and blatant nonsense—as it shows itself to be on its very face—is impliedly vouched for by the paper that presents the advertisement. It cannot deny the responsibility of this fact, try though it may to hide behind the statement that it does not assume responsibility for all that appears in its columns. The inexperienced reader does not always discriminate between the advertisements and the news columns. In fact, the news managers provide against such discrimination, frequently, by making such unworthy advertisements resemble as closely as possible the regular news material of the paper, or by setting it up as telegraphic matter.

Barefaced fraud it may be, extravagant in its wild distortions of the simplest truths of physiology or pathology, absolutely misleading and dangerous in its teachings—it is all one with the newspaper management; the malicious purveyor of quack nostrums is accorded the same welcome, prominence and implied sanction that are given the legitimate and worthy advertiser. He is taken bodily into

the family of self-promoters. And this is a part of the vaunted "power of the press."

Successfully deny their responsibility? The press is *particeps criminis* in presenting such fraudulent material. It cannot to the slightest degree gainsay the charge. It divides the spoils of the swindle, keeping for itself a goodly portion in the shape of fat advertising fees, and yet detracting none from the emoluments of its partner in the fraud, the quack advertiser.

Of the two parties of this unholy alliance, which is deserving of the more vigorous condemnation? The knave who, probably, has been a devotee of false pretenses all his life; who practices medicine through the mails in this manner without ever having seen the inside of a medical college; whose conscience never was affected to the degree of a sincere twinge, but whose only thought, as in Weir Mitchell's "Autobiography of a Quack," on being caught and punished for a crime, is that he should have been more cautious in its commission, and that he "will be more careful next time." Is this the partner that we have a right to expect much of, and condemn in corresponding degree when we find that he betrays our trust, promises great things, but sells us the cheapest of valueless concoctions? Or is it the great modern daily newspaper, rich in its overweening success, in its power for good (and, alas! for evil), in its fattening circulation, in its far-reaching influence, its ambitious teachings, its self-proclaimed unceasing war on things unholy and erroneous? Which of the partners, I ask, is deserving of

the severest condemnation for engaging in such business? The one that ever claims to be both the teacher and exponent of respectability, or the one that is generally recognized to be the dregs of society, an outcast from decency by the mere fact of his calling? I leave the answer to you, without misgiving as to your conclusion.

Listen to one of these false prophets as he brays from the secure embrace of any one of a number of our great dailies, never failing in the Sunday editions: "I will give \$1,000 if *I fail to cure any cancer or tumor* I treat before it poisons deep glands or attaches to bone. . . . No x-ray or other swindle. . . . *Any lump in woman's breast is cancer* nearly always." This forceful claim and horrifying generalization on tumors of the breast is re-inforced by an illustration of a devil-fish bug that is supposed to typify cancer, with its "roots" reaching out in every direction. Woe to the woman who has a "lump in her breast" unless she goes straightwith to Dr. Quack and receives his balm that never fails.

The motto of the New York *Sun* is, "If you see it in the *Sun* it's so;" and at the same time the *Sun's* advertising columns contain burning tributes to the appropriateness of "pe-ru-na for the society woman" at any season of the year, toning the system in the summer more than a vacation, and curing colds in the winter. The New York *Herald*, that aristocrat of newspaperdom, presents glowing advertisements of "Radium Radia," "the greatest remedy ever discovered for rheumatism, neuralgia, coughs, colds, sore-throats, sprains and swellings." In the same issue in which this same



paper lifts its hands in holy horror at the actions of a diploma-mill, it prints the advertisement of that self same mill. Our sturdy and usually reliable old *Globe-Democrat* of St. Louis prints a page on Sundays that reminds one of a rogne's gallery, so numerous are the pictures of eminent sure-cure men—honest, all, and true; that is proved because it is so stated in each advertisement that goes with the picture. Moreover, they are philanthropic, because not one will accept any money for advice or for treatment, the medicine—and the advertisement, probably—being the only things charged for.

"Is that box of salve worth thirty-five dollars?" asked an anxious young man of a druggist friend of mine. He had just paid that much for it to one of the advertisers in the above named Sunday gallery, one proclaimed (in capital letters, of course) that his advice was FREE. The young man thought that the salve must contain gold—which it evidently did, for the quack.

But, had he known it, he was getting off easily. With the able assistance of good newspaper advertising, a "Doctor" Kane and his assistant in New York took \$9,000 from a carpenter, selling him a so-called radium solution, at \$1,200 per thimbleful. Both of these swindlers were finally arrested and are now in the penitentiary; but their co-partners in the deal, the newspapers, are still carrying on business at the old stands.

"A prominent magistrate of New York," declares *Collier's Weekly*, "calculates that many times as much money is secured under false pretences through grossly fraudulent

publications in newspapers as is secured by burglary." Think of it! And at the same time, try to estimate the relative expense and attention bestowed on the prevention or restriction of the two crimes. As *Collier's* further says, "No man is allowed to practice medicine without a license. If he does he can be arrested. If, however, he puts up a certain amount of wood alcohol and gives it an alluring name, he is allowed by our enlightened government to prescribe it to people all over the country whom he has never seen. In this enterprise he is assisted by newspapers of every grade."

The out-and-out misrepresentations of such advertisements appear on every hand. The advertisement that lauds Lydia E. Pinkham's vegetable compound explains Lydia's wonderful ability in treating all women (none of whom, of course, has she ever seen (strictly "absent treatment" this) as follows: "No physician has had such training or such an amount of information at hand to assist in the treatment of all kinds of female ills. This is the reason why Mrs. Pinkham, in her laboratory at Lynn, Mass., is able to do more for the ailing women of America than the family physician. Any woman, therefore, is responsible for her own suffering who will not take the trouble to write to Mrs. Pinkham for advice." This is from the advertisement running in the publications in the country, and all the while the stately monument of Lydia E. Pinkham stands at Lynn, Mass., marking the decease and burial of that estimable lady in 1883!

Dr. A. J. Read recently made a



demonstration of the alcoholic qualities of Peruna, Hostetter's bitters and other cheap whiskey-and-bitters concoctions. A \*tablespoonful each of Peruna, Hostetter's bitters, Pinkham's vegetable compound and beer was placed in separate bottles, which were connected by rubber tubing to small burners; they were warmed, and the alcohol gas coming from them was ignited. The three patent medicines gave a flame from two and a half to four minutes, while the beer for only twenty seconds. With this experiment in mind, we can better appreciate the sequence of events that recently occurred in the family of a conscientious and highly esteemed clergyman, whose family became much worried over his unaccountable actions and demeanor. The family physician was called in, and held serious converse with him, after which the following colloquy occurred between the doctor and the eldest son:

"Harry," said the doctor, "do you know what is the matter with your father?"

"No. We sent for you to tell us that."

"Well, I am sorry to tell you that your father is suffering from chronic alcoholism."

"Chronic alcoholism! Why, that's ridiculous! Father never drank a drop of liquor in his life, and we know all there is to know about his habits."

"Well, my boy, its chronic alcoholism, nevertheless. How has his health been lately? Has he been taking any medicine?"

"Why, for some time, six months, I should say, father has often complained of feeling unusually tired. A

few months ago a friend of his recommended peruna to him, assuring him it would build him up. Since then he has taken many bottles of it, and I am quite sure he has taken nothing else."

While to the laity the monetary aspects of these swindling schemes may appeal as unjust and deserving of condemnation, we of the medical profession know that it is by far the least injurious and least serious aspect of the question. We meet with other phases of the question—those in which the poor, deluded patent medicine habitués have gone the gamut; have descended the path from health to chronic invalidism; from hope to misery. We have met with the individual who in the beginning of a tuberculous infection has frittered away his time and opportunity for recovery by indulging in such seductive traitors as peruna, "soothing syrups," liquozone, etc., to the exclusion of measures that might reclaim him. Here first appears the appalling nature of the crime. Or, take the strong, healthy young man, on the threshold of a business career, poor in purse, but rich in ambition and potentiality. He reads the advertisement of one of the picture-gallery quacks. He is impressed with the the intimate relation, as they claim, between night emissions and "lost manhood." He is not aware that it is health and strength that pave the way to night emissions, in the absence of normal intercourse; that they are a provision of nature to take care of an overstocked organism under just such circumstances. He accepts the false dictum of the quack—how is he to deny it, knowing nothing of the

subject?—consults him, and then he has a hard time getting out of his clutches. He immediately becomes a subject of “lost manhood,” “varicocele” or other diseases of which he knows nothing, and is supplied with a symptom to fit all of his imaginings, as well as the wordy phrases of his quack consultant.

“Who steals my purse steals trash;  
But he that filches from me my good name  
Robs me of that which not enriches him,  
And leaves me poor, indeed!”

Who robs the youth of his ambition, his hopefulness, his trust in the future, robs him of his all. And the scheming, heartless charlatan does this, if he can. He enmeshes him as far in the toils of his net as he is able, fairly feeding him on the bugbears of “spermatorrhea,” “youthful indiscretions,” etc., and incidentally draining him of as much of his weekly earnings as he is able.

I have been consulted by a number of young men, in the past several years, who had been convinced by such means that they were sufferers from such disorders; had been undergoing so-called treatment for varying lengths of time (always for as long as they could be held in the traces), when *in fact they had not been diseased at any time*, but had been healthy and sound. The misery and mental suffering they had experienced had been absolutely unnecessary, foisted on them with fiendish ability and criminal premeditation. Such action is a crime, pure and simple, and of the basest sort; and if the public understood the conditions well, I believe it would be listed in the category of penitentiary offenses.

The refinement of knavery of this

kind is shown in an advertisement that appears regularly in most of the leading publications of the country, as follows:

“TEST YOUR KIDNEYS: Let some morning urine stand for twenty-four hours in a glass or bottle. If then it is milky or cloudy or contains a reddish brick sediment, or if particles or germs float about in it, *your kidneys are diseased.*” No loophole of escape is left the credulous reader: for the specimen of urine that after twenty-four hours will not show some of the characteristics named, does not exist. The decomposition and sedimentation incident to perfectly normal urines is thus seized upon and by absolutely devilish intent and malicious misrepresentation, made to do duty as an indication of disease of the kidneys—Bright’s disease. Many impressionable people are imposed upon in this way, receiving the seeds of melancholy that in certain instances cannot be removed by the best of counsel. For instance, in the same issue that contained the above quoted advertisement, the following news item also appeared: “Suicide Due to Causeless Fear. Andrew J. Teggin, an artist whose pictures have been exhibited at the Academy of Design, took chloroform today and died at the New York Hospital. Teggin’s death was the result of five years’ dread of Bright’s disease. Although many eminent specialists had assured him he had no symptoms of the disease, he persisted in believing that he was doomed to die from it, and this so worked on his mind that he killed himself rather than wait for the end he felt sure would come.”



It is astonishing to what limits these fakers go in laying their ridiculous claims before the people. One bold individual proclaims that, without the use of the knife, ligatures or operation, he cures with marvelous celerity, varicocele, stricture, loss of manly vigor, contagious blood poison, ulcers, skin diseases, kidney, bladder, and prostatic diseases, piles, rupture and hydrocele, and all private diseases. In fact, all unnatural discharges "are stopped in twenty-four hours." He cures stricture by applications which dissolve it completely, etc. A patient who consulted Dr. T. A. Hopkins of our city, after he had had his strictures "dissolved out" after this fashion, was found to be in the most deplorable condition imaginable. His urethra from end to end was a mass of scar tissue closed tight against the passage through it of urine; false passages and infiltrations of urine preceded numerous abscesses, septicemia and involvement of the peritoneum, diffuse peritonitis; death shortly afterwards relieved his sufferings, notwithstanding the best efforts of several surgeons who were in counsel on the case.

Here was a man who had been irretrievably damaged by a so-called process of treatment that is known to be not only futile for accomplishing favorable results, but necessarily injurious to any tissues that it could "dissolve out."

In another regular advertisement, the Fulton Company explains that Bright's disease and diabetes, heretofore incurable, are now curable in 87 per cent. of all cases by Fulton's compounds. The symptomatology for determining the diagnosis of these

two diseases is made broad enough in the advertisement to spare no one who examines his urine according to the directions given. The principle of "let no guilty man escape" is utilized to the fullest capacity in such trick-writings.

The public, of course, knows or understands little of such conditions, but stands ever ready to listen to and absorb these self-laudatory perorations. Those who are least able to afford it—the poor and ignorant—are the ones most persistently and successfully preyed upon.

We have, then, the indisputable evidence that these evils exist; and when we consider them squarely, we realize that they are not inconsiderable, whether weighed in the light of pecuniary or other relationship. The next point for consideration is how best to eradicate them.

Under such circumstances it is the usual habit of the people to resort to legislative enactment. Paternalism in the government is usually vociferously advocated by the fellow who wants to regulate his neighbor in some respect, but he deprecates it strongly enough when he thinks his neighbor wants to regulate *him* by it.

But, while legislation should play a part in such regulations, it is questionable how far it may be made to reach. For instance, since beginning the preparation of this address, my friend, Dr. Scherck, has called my attention to the existence in the Municipal Code of St. Louis, of the following ordinance, apparently bearing distinctly and heavily on the evils under discussion; and others, not necessary to quote here, refer as definitely to the circulation of hand



bills on similar topics. And yet I have not been able to find record of their having been put to the test of constitutional regularity, although they have been in the code since 1883.

SECTION 1447.—*Obscene Newspaper Advertising Prohibited.*—Any person who shall in the city of St. Louis advertise or cause to be advertised in any newspaper printed or circulated in said city, or shall print or publish any advertisement or notice in any newspaper printed or circulated as aforesaid, purporting to give information as to the treatment of venereal or private or womb diseases, or impotency, self-abuse, sterility or any disease pertaining to the genital organs, or purporting to give information from whom or where medical treatment or medicine may be procured in the above mentioned cases, or any of them, shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than fifty nor more than five hundred dollars for each and every offense. (R. O. 1892, sec. 988.)

At the most, legislative enactment is a roundabout way to correct such evils that concern the people so broadly and yet so intimately. This evil is chiefly a matter of "fooling all of the people all of the time." If we can show the people the facts; if we can educate them to an appreciation of the degree of their gullibility, that will help some; but I believe it will prove a difficult part of the task. Because, as P. T. Barnum said long ago, "the American public likes to be humbugged." And the patent medicine habit has become a fixed one with a large proportion of the people; they are never happy unless they are miserable—and taking some-

thing for it. But education has worked other revolutions, and we should not despair until this remedy has been applied.

There is a widely-disseminated and growing belief, now, that matters pertaining to sexual physiology and pathology should be taught in a simple way to the budding youth of both sexes, in the course of their regular education in order to place them in position to resist the temptations that beset young life, by the clearer understanding that such instruction would afford. The errors of youth are *because of* youth, mainly, and are not only laid aside, but are even forgotten, when the mental majority is reached. Such instruction might well be amplified with warnings on the topics now under consideration. Lectures are given on the anatomy and physiology of the heart, lungs, liver, etc., in academies and other general educational institutions, but the instruction that would be of far more practical benefit to the auditors is carefully withheld, totally ignored. On these subjects they are left to find out what they can as best they can; and it is usually the *worst* that they can, through sources and channels the most depraved. Nothing can be in favor of this system—if system it can be called. It means simply the abandonment of youth to its own resources, and you know what they are. As the boy said, who was desired to write an essay on Nero, "The less said about Nero, the better."

Instead of attacking these evils negatively, as is done at the present time, by ignoring them, let us attack them actively. Let us make use of

educational channels of all sorts to spread the information, in a scientific, dignified, truthful and wholesome manner, and such instruction will be received in the spirit in which it is imparted. When properly presented, youth is entirely capable of considering these matters intelligently and judiciously; and it is only just that it be given the opportunity to consider them in the light of truth and knowledge, bestowed with the guiding hand of experience.

But not the least important work for eliminating the villainies of quack advertising must relate to the publications themselves. If it could be made generally unfashionable for respectable publications to carry such advertisements, the field for them would be narrowed, indeed. That is, however, in process of accomplishment at the present moment. A number of publications have already taken that stand. *Collier's Weekly* is foremost in the fight—for fight it is, and in earnest. In several of its issues during the past summer and fall it has not only portrayed the horrors of the patent medicine and quack advertising scourge, but has not been lenient in taking the newspapers themselves to task for their hypocritical and pusillanimous conduct. Under the title, "Criminal Newspaper Alliances with Fraud and Poison" (*Collier's*, July 8, 1905), Norman Hapgood lays on with no uncertain stroke; and later, under the heading, "Murdered by Advertisement," it has this to say: "Patent medicine horrors have never reached a point of deeper degradation than in the yellow fever troubles of the South. Mr. Samuel

H. Adams, whose series of articles will begin in five or six weeks, will hardly have anything more startling to narrate than the incredible performance of 'Peruna' in alliance with the New Orleans *Times-Democrat*. This sheet has accomplished a feat of prostitution which, considering its pretence to respectability, probably sets the record. While the South is struggling to check a peril of the direst magnitude, this newspaper publishes an 'interview' with 'Dr. Hartman,' with the familiar allegation that he 'said in part,' and all other devices, to make it look like an important piece of news. Its headlines are: 'How to Avoid Yellow Peril—An Interview With Dr. Hartman Concerning the Yellow Plague.' To the reader this is the genuine opinion of a physician. He cannot know 'Dr. Hartman' is the head of the 'Peruna' Company, and that the *Times-Democrat*, in whom the reader presumably has some trust, is selling itself and the safety of its constituents for a bag of gold. 'A summary of this interview,' the *Times-Democrat* informs us, 'is being spread broadcast over the United States for the benefit of yellow fever sufferers.' The gist of it is that, while screens and other precautions are advisable, peruna should be taken at once, and continued during the whole course of the epidemic. For anybody who believes we have taken too seriously the patent medicine evil and newspaper complicity therein, this unspeakable outrage should be a lesson. Is there anything to which men cannot be led by money? To own a newspaper and hire it out to perilous fraud in an



emergency like the yellow fever danger, almost surpasses one's belief in human greed."

Several issues of the *Ladies' Home Journal* have presented striking object-lessons in the fraudulent character of patent medicine advertisements; some of them I have already alluded to. Needless to say, it refuses to pander to such fraudulent business. The *Boston Herald* assures me, in a personal note of recent date, that while it does not exclude all medical advertising, it does exclude such as cannot be read before children, which cuts out from its circulation the swarms of venereal "specialists," with their varicocenes and other bugaboos. The *Minneapolis Journal* has declared for the same policy, saying that it will keep its columns free of offensive medical advertising at least. The *Emporia* (Kansas) *Gazette* has also joined the ranks of the respectable in this matter and the *Marine Telegram*, Marine, Illinois, and the *Vernon Weekly Hornet*, Vernon, Texas, refuse to accept quack advertisements. A tendency in the same direction, indicated by expressions of commendation of *Collier's* course, is manifested by the following: *Brooklyn Eagle*, Brooklyn, N. Y.; *Ortonville, Minnesota Journal*; *Lowell, Massachusetts, Sun*; *Menominee, Wisconsin, Times*. A survey of the better class of monthly magazines discloses a very small proportion of their space, if any, devoted to charlatanism. Among them the death-knell of the quack advertiser has already been sounded; and it is a fact that he now luxuriates only in the daily newspapers and the magazines of the lower order. It is not

unlikely that this distinction will become more evident as time passes, and fuller knowledge of the wiles of the charlatan is disseminated. The wheat will be sifted from the chaff in literature, and the journals that continue to patronize and advertise such frauds will be stamped as "yellow" and dishonest, whether any legislation ever steps in to control the situation or not. But it is primarily to the education of the people to which we must look for providing either the required legislation, or the belated impulse for self-respect and decency on the part of the newspapers.

At the twenty-first annual meeting of the Mississippi Valley Medical Association held in Indianapolis, October 10, 1905, the following preamble and resolution were unanimously adopted by the surgical section:

WHEREAS, The medical profession keenly realizes the great and increasing public evil, moral, mental and physical, arising out of the support given by the public press to the so-called patent medicine interests, leading to the pernicious practices of self-drugging, narcotic habituation, and alcoholic excess; be it

*Resolved*, That the Mississippi Valley Medical Association commends and frankly endorses the attitude adopted by *Collier's Weekly* and the *Ladies' Home Journal* in giving publicity in the articles by Samuel Hopkins Adams, Norman Hapgood and Edward Bok, respectively, to the truthful exposure of the nefarious practices and unscrupulous methods of the so-called patent medicine concerns.



## PART II.

*On the Prophylaxis of the So-called Venereal Diseases.*—Another subject which I believe to be well worthy the attention of our Association is the determination of practical methods of protecting our people—and more especially the youthful part of our people—from the far-reaching and diastrous effects of those diseases generally termed venereal, but which are not uncommonly entirely innocent in their development; I refer to gonorrhea, syphilis and chancre.

When contagious diseases like smallpox, yellow fever, scarlatina, etc., prevail in a community, there is united effort on the part of authorities and people to limit their spread and stamp them out by means of keeping track of every case, and the adoption of various sanitary regulations. Expense is not spared to accomplish the object by whatever means possible.

But no such endeavor appears with reference to the vastly more widespread and more injurious contagious diseases mentioned. Like the ostrich of the desert, the authorities and the public bury their heads in the sand and ignore the whole subject. They want no identification of such infected (and therefore dangerous) individuals; they desire no statistics on the subject, and aim at no means whatever to secure to the healthy part of the public immunity from contamination at the hands of the unhealthy. And yet these diseases prevail to an extent undreamed of by the people and those in control of the public health of our country.

*Prevalence of Syphilis and Gonorrhea.*—Those who make a comprehen-

sive study of these matters say that syphilis is the most important, from whatever standpoint considered, of any disease extant. It is, of course, difficult to arrive at an accurate estimate of the prevalence of these diseases, but by the best posted investigators it is claimed that in Paris one-seventh of the whole population is syphilitic; one-twelfth of Berlin's population are similarly affected, making about 150,000; one-fifteenth of New York's, or 225,000. Probably the other large cities of this country will furnish a similar proportion, the whole meaning an appalling number; all contagiously diseased and associating as they please, without restriction, among the people whom they contaminate *ad libitum* as time passes and opportunity offers. A conservative estimate will place the number thus affected in this country at upwards of two and a half millions.

While, then, the percentage of syphilitics among the urban populations of the present day is reckoned at from seven to fifteen, and this makes a startling announcement when we face it squarely, what must we think when it is declared that gonorrhea, which is now looked upon as being much more destructive to life and in certain respects more serious than syphilis, is prevalent in much greater proportion, still? That many students of venereology claim that of the male part of our population fully *ninety per cent.* have been affected with gonorrhea at some time in their lives! Further, while it may seem an anachronism to attribute a large share of gonorrheal infection to the virtuous wives of our country—the noble women who are “behind the throne” in this

wonderful country of ours—we must listen when a man of Prince A. Morrow's standing and knowledge of the subject makes the following statement: "It may be a startling statement, but nevertheless true, that there is more venereal infection among virtuous wives than among professional prostitutes in this country. Noeggerath stated that of every thousand men married in New York, eight hundred had latent gonorrhea, from which their wives became affected. Admit that this is an exaggeration—a gross exaggeration—say eight per cent. instead of eighty per cent.; of the sixteen million married women in this country, eight per cent. would give one and a quarter million infected with gonorrhea alone."

These statements refer to the adult population, only; in a recent discussion of this subject in New York, Dr. La Fetra called attention to the prevalence of gonorrhea and syphilis among children, approximately all of whom, it may be remarked, acquired the diseases innocently. At the Vanderbilt clinic, where about 3,000 new patients were seen yearly, from six to ten per cent. were syphilitic patients, while from one to two per cent. suffered from gonorrheal infection, exclusive of infection of the eye. It had been found necessary to establish a special section in the clinic for the treatment of gonorrheal vaginitis in children."

Gonorrhœa and its complications are, in fact, much more frequent and common than appears on the surface, or even on a casual investigation of the subject, and for well-founded reasons. It is present in an enormous number of persons who are not aware

that they have it; who believe that they have never had it since the discharge stopped some months or years previously. In such cases it is as insidious as it is persistent, and the accusation that they still have it is indignantly denied. On the other hand, motives of pride, shame, secrecy all impel the individual to hide his infection when he has it, or to deny it even if it is demonstrated that he still suffers from a lingering remnant of the infection. Also the fact that recurrences of outbreaks of an old infection of this kind are commonly interpreted by practitioners as "nothing but a strain," etc., restricts the recognition of the prevalence of this infection in its true light.

*Prevalence of So-called Venereal Diseases of Non-venereal Origin.*—While this, also, is a matter difficult of determination, it is well established that the so-called venereal diseases affect human kind to a very large degree through *accidental and wholly innocent agencies*. It is asserted by those in the best position to know, that 10 per cent. of men who have syphilis acquire it in a blameless manner; while of the women thus affected, from 25 to 50 per cent. are infected through no fault of their own. Of married women, some authors give as high as 85 per cent. innocently infected.

It is well established, for instance, that because of certain domestic habits or customs, whole communities in some countries are affected with syphilis, practically all of them having acquired it without any immoral relationship.

Like pale death, it knocks with equal fate at cottage door and palace



gate. Moreover, it is no respecter of age; the child, the adult, the aged are alike the subject of its fell attack, and without the ignominy of "venereal" being attached to the mode of obtaining it.

*Why Syphilis is so Frequently Non-Venereal in Origin.*—Even a rudimentary knowledge of the nature and characteristics of the disease explains why syphilis is so frequently non-venereal in its mode of transmission. It is a constitutional disease and affects the whole body of the individual, thus affording a large area for the presentation of the lesions of the disease, which may appear at any point on the body, or at or within any of the outlets of the body, the mouth, nose, anus, etc. All of these lesions may give rise to the secretion of material that is contagious, capable of conveying the disease on being applied to an exposed point on the body of a healthy person. Moreover, the time during which this disease is actively contagious is much longer than for other contagious diseases. It extends over several years (two or three, at least; sometimes longer), instead of several weeks, as with scarlet fever, etc. Here, then, is a person, for two or three years' time, subject to repeated outbreaks of the disease, the secretion from any lesion of which is poisonous to healthy persons—whether it comes from skin eruptions, mucous patches of the mouth, lips, tongue, cheeks, gums, tonsils, throat, nose, eyes, ears, face, scalp, hands, fingers, toes, body or limbs. Consequently we find chancres (the first lesion of syphilis) located, in different cases, at all of these points. And when they occur at

points other than the genitals the origin is usually non-venereal.

Such innocently acquired chancres were formerly supposed to be rare, but further observation has shown that to be far from the case. Fournier, for instance, one of the world's greatest syphilographers, says that for years he overlooked chancres of the tonsil altogether, and yet latterly Krefting alone reports fifty-eight such cases in his own practice. Chancres located at this point (tonsil), instead of being derived from venereal contact, are much more commonly the result of domestic practices which transfer the contagion by means of eating utensils, or by that simple but necessary process of wet-nursing, with the following sequence of events: An unfortunate or a dissolute husband brings syphilis into the family, infecting his wife and the child she bears him. For some reason the mother is unable to nurse the child, and a wet-nurse is employed. The syphilitic child nursing at the tender breast of the healthy woman soon inoculates it, and a chancre develops there, followed by systemic syphilis, as complete and far-reaching as that acquired by sexual contact. If the woman thus infected is ignorant of the conditions prevailing, or is careless, she further spreads the disease by suckling healthy infants, who in turn are capable of conveying it to their healthy parents. A very considerable number of epidemics started in this manner and involving many innocent persons, are on record. Bulkley (*Syphilis in the Innocent*, 1894) tabulates no less than twenty-four such epidemics, infecting many



hundreds of persons. The old fashion of cupping used to be a prolific source of spreading this disease innocently; twelve such epidemics are recorded in the tables of Bulkley (*ibid*). Other modes of starting and disseminating the disease wholesale are well known, such as by vaccination, tattooing, glass-blowing, eustachian catheterization, parturition; and various domestic employments that bring about intimate relationships between people, one of whom becomes infected and does not exercise the necessary precautions to prevent contagion.

Montgomery (*California Medical Bulletin*, July, 1905) describes a custom that obtains in certain parts of Russia that leads to the indiscriminate transference of syphilis, the chancre appearing in most such cases in the mouth or on the tonsil. At meal time a large dish of thick porridge is placed between two eaters, who dip in with a large spoon. Such spoons are never washed, but are licked off and stuck into a hole in the wall to dry for the next meal. By this and other similar means the disease is spread so widely and without genital contact that no shame is attached to having it.

Before the cow was used as a medium for the cultivation of vaccine virus, many small epidemics of syphilis occurred in communities through the contamination of the virus by some syphilitic person on whom it was cultivated. Also, the custom formerly in use by surgeons, of using one knife-blade for making a series of vaccinations, was followed by disastrous results. One person in the series being syphilitic contaminated the

knife, and most of the remainder received syphilitic as well as vaccine virus.

But, as you know, an understanding of the unfortunate results of such customs has led to their abolishment. One now never hears of a case of vaccine-syphilis, which in itself is an object-lesson on the benefits derived from scientific study of these matters and the dissemination of knowledge concerning them.

These remarks refer to *epidemics* of the disease; individually it is many, many times conveyed in the most legitimate—nay, unavoidable—manner. I am personally acquainted with a number of physicians who have been inoculated on the finger while making examinations of patients or operating on them. They have thus sacrificed themselves on the altar of duty to a degree not known by the public, but fully and lastingly realized by themselves. It is practically impossible for a surgeon to avoid the risk of contamination. In city hospital service I have on a number of occasions seen surgeons work without hesitation in desperate cases of surgical injury, while the patient was in the full bloom of secondary syphilis, every drop of his spurting blood endowed with syphilitic virus, enough to poison a multitude.

Many other vocations have this danger as an appanage. The professional nurse constantly runs the risk of being inoculated by the soiled dressings of an unrecognized syphilitic individual; the policeman, in contending with an obstreperous roisterer, is poisoned by a bite or a scratch in which some syphilitic saliva is deposited; I have seen cases in which prizefight-

ers had conveyed it from one to another in a similar manner.

*Why Gonorrhea is Frequently a Non-Venereal Disease.*—In the form in which gonorrhea is most dangerous to the community, from the standpoint of contagiousness, it is not the outspoken disease that makes its presence easily evident; on the contrary, it is obscure, insidious, persistent, in thousands of instances failing to make itself evident even to the bearer himself, though it is none the less fatal in its contagiousness. Indeed, it is just these quiescent, so-called latent, cases that conduce to the spread of the disease. A person with an active gonorrheal discharge is, on that very account, little liable to seek intercourse. He is forewarned of the danger of the act by the discharge itself. But the person who has been "nearly cured" of the trouble, so that, while there is no external discharge, there is yet a continuation of the infection in inaccessible parts of the urinary or genital tract—he is the one who presents the ideal conditions for spreading the contagion, either in promiscuous or domestic sexual relations. It is the bridegroom thus unconsciously affected who conveys the disease to his innocent and trusting spouse; who involuntarily endows her with more ills and a greater marital handicap than she can recover from in a generation.

The gynecologists are the ones who see the exposure of this subject in its horrifying aspects. The heartrending details they give us, of non-venereal gonorrhea in women, are hardly credible; and, while the medical profession is becoming convinced of their truth, they are hardly listened

to by the public, who do not wish to hear about such disagreeable things.

Gonorrhea is a true "venereal" disease, arising through illegitimate sexual contact—among children in something like 2 or 3 percent. of cases; among married women, in 15 percent.; among unmarried women, 90 per cent.; among men, about the same.

*The Damaging Effects of the So-called Venereal Diseases.*—We have alluded to the vast prevalence of these diseases among the peoples of the world; we have had an inkling of the extent to which they exist as non-venereal diseases, together with the reasons therefor; now let us take a glimpse—merely a glimpse—at the manner and extent to which they damage the people, and see whether it is not time that the medical profession is sounding an alarm that the people cannot escape.

If we proceeded to an ample rehearsal of the ill-effects of these diseases we should have to occupy the balance of the session for that alone; but we should find that, besides their direct attacks on the physical organism of the people, their influence is felt in practically all the relations of life—domestic, commercial, religious, political, forensic, hygienic, mortuary, and above all, in relation to the preservation and propagation of the species and the fecundity of nations.

They have a dominating influence on births, on life-processes, on death—and afterwards; for, verily, the sins of the father are visited on the sons for the second and third generation.

If authorities would hearken and learn the bearing of two diseases



alone—syphilis and gonorrhea—on the reproductive faculty, they would have to seek no further for an explanation of that much-talked-of “race suicide.” As a death-dealing agency toward unborn children, syphilis has no equal. It causes 42 per cent. of all abortions and miscarriages. Of unborn children endowed with hereditary syphilis, from 70 to 86 per cent. die either before the natural term of development or shortly after birth; and if they do not then die of the disease, they are usually stamped with its effects in a way that is never obliterated throughout the life of the poor, stunted, weazen-faced sufferer. In France alone hereditary syphilis kills 20,000 children yearly, which is  $7\frac{1}{2}$  per cent. of the total mortality from all causes for the year.

If there is needed any further reason to explain the receding birth-rate of France, it is furnished by the companion-piece of this affection—gonorrhea. While syphilis has this astounding influence in aborting pregnancies and cutting short the life processes of nature, it does not begin to equal the malign effects of gonorrhea and its sequelæ in *preventing conception*. It is reckoned that more than 50 per cent. of women who have ever become infected with gonorrhea remain sterile the balance of their lives (some authors give even a higher percentage than this); while to gonorrhea in men is due 20 per cent. of all childless marriages that are involuntary.

In a recent paper, read by Dr. Morrow before the New York State Medical Association (*American Journal of Dermatology and Genito-Urinary Diseases*, August, 1905), the author thus recounts some of the items in the

pathological balance-sheet of venereal infection: “Syphilis is the cause, direct or indirect, of fully one-eighth of all diseases which afflict humanity. . . . Leaving out of consideration the superficial secondary accidents, and taking only lesions which may involve or compromise the integrity of important organs, we may place to the debit side of syphilis 90 per cent. of all cases of locomotor ataxia, more than 75 per cent. of all ocular paralyses, a considerable percentage of iritis, chorioiditis and retinitis; a large proportion of general paralysis, paraplegia and hemiplegia; 80 per cent. of all cases of paresis; every hemiplegia occurring in men under forty years of age, not addicted to liquor, is of syphilitic origin.

“The pathological liabilities of gonococcus infection are scarcely less formidable. Passing by the local inflammations, the articular and systemic complications in the male, gonorrhea in the female causes 80 per cent. of all deaths from inflammatory diseases peculiar to women; practically all the pus tubes; more than 75 per cent. of all the suppurative pelvic inflammations, and 50 per cent. of all gynecological operations performed by surgeons, to say nothing of a large number of women who drag out a miserable existence of invalidism.”

While gonorrhea is not hereditary like syphilis, into the second and third generations, it does enough execution in one generation to make up for any shortcoming in that regard; and, besides, the stigmata of the disease are not lacking in children born of gonorrheic women. They commonly receive gonorrheal inflammation of the



eyes, to which 80 per cent. of blindness of the new born is due, while 20 per cent. of the blindness from all causes is a result of gonorrhea.

*On the Measures for Prophylaxis of the So-called Venereal Diseases.*—Such, then, are these contagious diseases, ignored by the public, neglected by state and authorities, accepted and concealed by society, tabooed by the press, save in their nauseous advertisements of fake remedies and worse doctors; decried and loaded down under the designation, “venereal,” until one hardly dares mention them even in a medical society, because of the habitual odium attached to them.

Is it sensible, is it manly, is it humane, is it *right* to refrain thus from promulgating facts and figures that mean so much to humanity; of which so much practical use could be made if they were well understood? Shall we, custodians of this knowledge, idly wait for the awakening of the people to the realization of their error? Shall we hold the tastes and habits of society so sacred that we tremble lest we disturb its serenity? Lest, by saying unpleasant things we cast a ripple over the surface of the foul pool? Away with such complaisance and such fears! Let us tell the truth and shame the devil!

The question presented for our conning, then, is how best to make the attack? How best to gain the attention of those most concerned—the people—and get them to act for their own good?

I believe nothing is to be accomplished by prolonging the discussion of that much-mooted question as to

the propriety of legal control and regulation of prostitution. Aside from the approximate failure with which this plan has met on the Continent, where it has been in use under the most favoring conditions of governmental sanction and professional assistance, it is inexpedient to try it in this country, and we should apply our energies to more promising fields of work. Instead of trying to do what is, *prima facie*, impossible—to corral and disinfect *all prostitutes*—let us rather teach the public the dangers of prostitution, the dangers of the diseases to which it leads, the prevalence of such diseases in daily life, and how they are acquired innocently, and how they are to be avoided, and the necessity of seeking relief from them as soon as possible when they are acquired.

The campaign of education must be our chief reliance, and the medical profession, followed by the ministry, instructors in institutions of learning in general, philanthropists and leaders in public work, will have to be counted on as the purveyors of such education.

The youth of both sexes should be given instruction regarding these matters. I know the same old habit of ostrich-like reticence predominates here, and it is considered “not nice” to converse with youth on such subjects, on the ground that it might direct its trend of thought into a channel not desirable. As if youth does not think of such things on its own account, and discuss them, too, and mainly in the most unfortunate and harmful way, morbid curiosity prevailing and leading to practices and experi-

ments that prove disastrous, regrets and melancholy that comport but illy with that time of life.

In a talk with the students of the University of Pennsylvania, on a similar topic, Dr. R. N. Willson of Philadelphia, related the case of a country boy who came there as a student the previous year. He was induced by friends to visit a house of ill-fame, where he was infected with gonorrhea; shortly afterwards, when he noticed that his eyes were smarting, he was advised by one of his friends to bathe his eyes with his own urine. He did this; gonorrheal inflammation developed in both eyes as a result, and to-day the country boy is blind—and will be so the balance of his lifetime.

While ignorance alone did not lead this young man into temptation, since others less ignorant than he have succumbed to that temptation, it is a certainty that had he been correctly informed about the infectiousness of gonorrhea he would never have committed the fatal error of bringing his infected urine into contact with his eyes.

A school-boy friend of my own, returning from college to spend the Christmas holidays at home, was led by his friends into a similar ambush. In one night of indiscretion he was infected with gonorrhea, chancroids, and syphilis. A round of pleasure produced a penance of years; and at a time when he was least able to meet or carry out the requirements for recovery. The handicap of trying to give himself the necessary medicinal and other attentions, of maintaining concealment of his misfortune, of meeting the expenses required, and of

keeping up in his studies, was too much for him; he retired from his college in less than a year a physical wreck and a blighted individual. Had this boy known the fearful dangers he was running in going with his friends he would have at least been in better position to withstand the temptation presented. "Had I only known in time!" is an oft-repeated cry heard by the medical fraternity.

Morrow says: "The public does not know that the immense majority of such infections occur in the young, the inexperienced, and the irresponsible, through ignorance and lack of moral training. Seventy-five per cent. of all infections among public women occur before the twentieth year; and twenty-five per cent. of all infections in males occur before the twenty-first year. This is the age when the centers of arrest, judgment, reflection and will are not developed; an age when the individual is influenced by impulse, imagination and curiosity, before those maturer faculties of inhibition are developed."

What valid objection can there be to imparting such information to youth? Why keep that from the developing young boy that will help to fortify him against unavoidable risks and temptations of life?—leaving him in ignorance on matters that are imperious in their demands on his attention, that are natural to him; that, indeed, are the outcome of one of the first laws of nature, the reproduction of the species?

Why attempt to keep him in ignorance when you know that he will learn of such things some day; and if not properly taught him they will be learned through the most unfortunate



sources—from other boys as ignorant as himself, but perhaps possessed of a greater stock of misinformation. Which of two sources of instruction would be the better for the boy, the one in which distortions of truth and riots of indecency play the part, or the other in which in intimate and friendly conference his father or his family physician, the revered nestor of the family, explains nature's phenomena and her dangers, in a candid, dignified manner, free from sensationalism and pudicity?

There can be no question about it. Boys and young men are capable of considering these subjects seriously and judiciously if presented to them properly. If the veil of mystery and ignorance is drawn over them, that does not deter youth from making its own investigations, usually by reading quack newspaper advertisements and "marriage guides," or even by conferring with that fountain-head of venery, the harlot herself.

If, then, ignorance plays such a large part in the original dissemination of such affections, the natural corollary is that enlightenment should be a material factor in limiting them and conserving the health-interests of especially this portion of our citizenship.

I have for a number of years been convinced of the correctness of this stand. I have had a number of personal conferences with boys, sent to me for the purpose by their parents, and have in no instance found cause for regretting the step. They have appreciated the explanations made, have asked questions intelligently, and have profited materially by the conferences. Moreover, if, notwith-

standing the warnings given, their curiosity has led them into trouble, they have at least been in position to act intelligently by going promptly to regular medical practitioners for treatment, rather than accept the questionable, if "free" service of quacks or even of druggist friends.

On two occasions in St. Louis I have, by invitation, delivered lectures on the simpler aspects of anatomy, physiology, and diseases of the genito-urinary system, before audiences of pharmacy students. From their comments I have felt that the effort was not altogether misplaced or unappreciated, and that that form of criminal meddling called "counter-prescribing" for such maladies would be less practiced by those present, who thus learned the fallacy and total inadequacy of such a plan.

These experiences, together with reasoning by analogy, have made me the more convinced of the propriety and advisability of inaugurating some regular method of teaching the youth of both sexes the rudiments of their natures, and what else is found to be desirable on maturer consideration and tentative application of the belief. If it be objected that the school period of life is too early to begin the teaching, it must be remembered that this is the very period in which the greatest proportion of unfortunate mishaps occurs, not alone with regard to venereal infections, but with regard to unfortunate habits and practices into which children lapse before they are taught the dangers. Of illegitimate pregnancies among girls, it is probable that nine-tenths are brought about through ignorance of the se-



quences of dallying with friends of the opposite sex. Anatomy and physiology of the heart, the lungs and muscles are assiduously taught them in schools, but the subjects that would be of most practical benefit to them are as carefully kept out of the curriculum, leaving the young woman to save herself by her own intuition and self-respect. And if, in the difficult conditions of the present day, she pass unscathed through the vicissitudes of this period of her life, she has yet to go untaught through the awesome experiences of married life. If, after that, she does not suffer from the effects of ignorance on the part of her husband—from an unrecognized or uncured gonorrhea or a veiled syphilis—she may be considered fortunate indeed.

If it be considered advisable to provide such systematic instruction for the youth of our communities, shall we withhold the benefits of similar instruction from those who have passed the age of school life, the working classes of both sexes, for instance? Young men's and young women's Christian associations, and other similar organized bodies, are rapidly acquiring the habit of receiving regular instruction in useful arts and employments in night lectures given by philanthropic citizens. Is there reason why they should not receive sensible instruction on these topics? Assuredly not. Organize your teaching forces and you will meet no lack of interested auditors, eager to obtain at first hand a correct interpretation of the laws that govern their sexual make-up.

That this movement of prevention

and reclamation is accumulating and assuming definite shape, is shown by the numerous writings on the subject, in various parts of the country, by members of the medical profession—writings that of late have been more practical in their suggestions for a solution of the difficulties encountered, and less theoretical in their prolonged discussion of the propriety of regulating prostitution, etc.; but more especially is the definite progress indicated by the history of recently organized societies, formed for the purpose of studying and promulgating methods for the prevention of these diseases. The American Medical Association has taken up the subject systematically, and has delegated an able committee to carry on the work of collective investigation and to report at the annual meetings. Two international congresses for the prophylaxis of venereal diseases, in which every civilized country in the world was represented, have been held in Brussels. From these was evolved the plan to form, in different countries, societies of sanitary and moral prophylaxis, to study and put into effect the best means of every kind—moral, legislative, social, as well as medical—to be adopted for the prevention of these diseases. Such societies have already been organized in many of the countries of Europe (France, Germany, Italy, Holland, Spain and others); that of Germany possesses a membership of nearly four thousand, with twenty different branches; while in France it has nearly one thousand members. Within the present year, under the inspiration of Dr. Prince A. Morrow, the

American Society of Sanitary and Moral Prophylaxis has been organized in the East, has had two enthusiastic meetings, and has drawn into its membership not only prominent members of the medical profession, but the clergy and the legal fraternity have shown their desire to further the movement by becoming members and by their active participation in the work of the sessions. I recently received a note from Dr. Morrow, in which he says: "I am sending you under separate cover a pamphlet issued by the American Society of Sanitary and Moral Prophylaxis, and one or two other papers, which will give you an idea of what we are attempting to do. We have begun the work along educational lines, taking up first the instruction of the youth of this country, as you will see from the program in the back of the pamphlet.

We desire to have branch organizations in all the states. Such societies are now being formed in at least two of the western states, and, as I understand, in Massachusetts. The movement is gaining in interest and, I trust, in strength throughout the country. I hope that you will be able to help us."

This society has already held two successful meetings, and another meeting is scheduled for the present month (October), at which questions of the propriety, the nature and the scope of instruction on sexual physiology and hygiene are to be taken up.

Away with prudery; meet the enemy openly and fearlessly, the enemy that is sapping the very life-blood of our noble nation, and doing it because we are shame-faced and hesitant in our fight against it!

## DISCUSSION.

Dr. Blair: Among the other papers in line on this advertising scheme was the *Woman's Magazine*. Mr. Lewis told Dr. Blair that he had excluded from his magazine "any medical advertisement referring to treatment below the waist line." Dr. McCormick told him that in Louisville objectionable medical advertisements (and this included patent medicines) had been excluded from at least one of the papers there by a simple explanation to the editor of what these things were. He had been impressed by the statement of Dr. W. J. Mayo, that the main fault of all quack practice of medicine lay with the regular practitioner, in the fact that they had not heretofore acknowledged to their patients that the majority of ailments for which patients call upon the doctor were self-limiting, and at least improved of themselves. This lack of frankness on the part of physicians had made an opening for the vast army of irregulars to do the same thing.

Dr. Joseph Grindon thought it was a most timely paper. There seemed at last to be an awakening of the public to the great evil of the use of "patent" medicines. Most of the members would remember J. Cresap McCoy. He had advertised largely, especially in the Sunday papers, publishing pictures of patients he had "cured," together with testimonial letters. At that time Dr. Grindon was one of Dr. W. C. Glasgow's assistants at the old polyclinic. An old German who had atrophic catarrh used to visit the clinic to have his nose washed out. He had absented himself for some weeks when there appeared in a daily paper a picture of



this patient and a letter stating that he had suffered many years with catarrh, had been treated by many prominent specialists in St. Louis without avail, and that Dr. McCoy had cured him. A week or two later he turned up at the clinic as usual. When asked why he had given the testimonial, he replied that his daughter had been trying for years to get him to have his picture taken, and that Dr. McCoy had offered to give him eleven pictures out of a dozen if he would sign a testimonial. Again, a superintendent of a street-car barn learned that acetanilid would relieve some headaches, so he put up some powders and gave them the name "nervino," doubtless as good a name as any of the others under which acetanilid masquerades. One evening this man met a friend whose wife was subject to headaches, and gave him some powders in an envelope bearing the statement that they were perfectly harmless. The next morning there walked into Dr. Grindon's office a very remarkable apparition, a lady with a blue dress, blue eyes, blue face and blue hands. She stated that she had awakened with a headache, taken a powder, and, not getting better, in fifteen minutes had taken another. Soon after she took a third. Then she "felt queer," and going to the mirror to see if she looked pale, discovered that she was blue. Almost every physician has seen patients made blue by these headache powders. This particular coal tar preparation, being the cheapest of the lot, was oftenest used in these preparations. Something could be done by spreading among the people a knowledge of these

things, but more could be done by the enforcement of existing laws.

Dr. T. A. Hopkins said the case to which Dr. Lewis referred gave a very instructive lesson in the possibilities of the so-called digestive treatment of stricture. The patient was referred to the speaker by the physician who applied this treatment, it having been his first, and presumably last, experience therewith. The history of the case was secured from the patient. At the first examination he found a large fistulous opening on the underside of the penis near the peno-scrotal juncture, considerable inflammation and oedema, and a purulent discharge from the fistula. The urethra anterior to the fistula seemed entirely closed by the inflammatory process and its condition posteriorly could not at that time be determined. The patient gave a history of stricture so developed as to impede the flow of urine, but not to hinder its flow in a stream and with some force. Operation was advised, but he strenuously objected to the use of the knife, and the doctor decided to employ the "digestive treatment." This was done some days before Dr. Hopkins saw the case. The digestant was applied under cocaine anesthesia, left in the urethra, and the patient sent to his home and instructed to remain quietly until the next morning, when it was expected he would be able to resume work. About two hours after the application the pain became so extreme that he returned to the doctor and was comforted by a hypodermic; later a distended bladder and inability to urinate led to sending for the doctor; attempts to catheterize were without



avail, though a few drops of urine did make their way through the urethra, but not sufficient to relieve his distress. A tumor appeared at the peno-scrotal juncture, the site of the fistula, which was diagnosed as an abscess, but which the speaker concluded was a ballooning of the urethra. The patient's opinion was that this had burst, but Dr. Hopkins thought it must have been incised. From that time urine had passed from this opening and the urethra anterior thereto had been out of commission.

The patient was still of a mind to refuse absolutely to allow operative treatment, though it was so evidently and urgently indicated. Dr. Hopkins succeeded in passing a filiform, and during some weeks gradually dilated the strictured urethra until he was finally able to pass a No. 14 F., and had gotten the whole urethra in a better condition. The fistula remained open. The patient disappeared for a number of months, and it was on his return that Dr. Lewis saw him first. His appearance indicated a general poisoning, and local conditions were anything but promising. In spite of a very gloomy prognosis the patient was at last ready for an operation. The operation was done before the class at the Marion-Sims-Beaumont clinic. A mass of sinuses, pus pockets and matted tissue filled the lower pelvis and involved the penis and

scrotum. There were also an aggravated, purulent cystitis and an involvement of the kidneys. That the patient lived but a few days after the operation was no surprise to any who saw the condition. Neglect and a fear of the knife were doubtless contributing causes to his death, but behind all this lay the real origin in the use of the digestant which precipitated the whole trouble.

The theory on which the digestant treatment is based is that stricture tissue is scar tissue, and, being such, can be digested, while (it is held) living tissue will not be affected by the agent. The inaccuracies are evident. He never had been able to get the formula used in this case, but was given to understand that the digestive agent was some form of papoid.

Dr. Lewis, in closing, said there had been considerable progress in disseminating knowledge among the people to the end of limiting these diseases, practically and not theoretically. Any one desirous of keeping in touch with the progress of the work should write Dr. Prince A. Morrow, of New York. The members of the medical profession should think over the matter, and each try to evolve in his own mind, methods that would succeed in obtaining proper results. It was worth while to think over practical means by which these diseases could be restricted.

PRESENTATION OF A CASE OF UNUSUALLY LARGE  
ABDOMINAL ANEURISM.\*

BY HART GOODLOE, M. D., of St. Louis.

This unusually large aneurism is deemed worthy of presentation and record on account of its *position*, etiology, enormous size and resultant nervous symptoms.

Mr. H. Luft, age thirty-nine, occupation teamster, came to St. John's Medical Clinic September 21, 1905, complaining of a severe, constant pain in the left side—corresponding to the left lumbar region. The patient volunteered the information that he had been treated by two or more physicians for over two years for lumbago, but instead of the pains being relieved they were growing steadily worse.

*Family History.*—Mother alive, age seventy-four, in good health. Father died sixteen years ago at the age of fifty-nine from heart lesion, secondary to rheumatism. Three brothers, one sister—all well and healthy.

*Past History.*—No serious illness, no rheumatism, with a negative history of syphilis.

*Habits.*—Beer drinker.

Three years ago he received an injury, and quoting in part from one of the local newspapers that reported the accident at that time, viz.:

“He was driving on top of a wagon heavily laden with lumber on Gravois avenue near the city limits, when a Cherokee car crashed into the wagon. Luft was thrown from the wagon and the lumber was overturned upon him. When he was dragged from beneath the wreck he was taken to the South

side Dispensary, where Dr. E. found that he had severe concussion of the brain, and that he was bruised all over his body. He was sent to the City Hospital and the doctor said his condition is serious.”

At the City Hospital there were found two scalp wounds, which were examined for fracture; none being found he was sent home the same evening. (May add here the wagon had fifteen hundred (1,500) feet of lumber chained down and weighing approximately four thousand five hundred (4,500) pounds.)

He remained in bed at his home for two weeks, suffering the greatest pain in the left lumbar region, and after sixteen weeks of invalidity tried to resume his former occupation—but on lifting heavy objects he had pain in the left side, which progressed in severity on exertion until he was compelled to give up his work entirely.

About the middle of last April, 1905, he noticed a swelling over the painful area which was hard to the touch, but not painful to pressure. He thinks this came in the night, and in his opinion seems to have increased in size since then. About the same time he noticed his left leg began to tremble, and had pains radiating down the outside of the thigh, from the hip to the knee.

During the last few months, patient states he has had at different times girdle sensations.

Patient sleeps very little on account of the constant dull, boring pain. Walking or standing for a

\* Read before the St. Louis Medical Society November 11, 1905.

short time is said to greatly aggravate the pain over the hip bone and outer surface of the left thigh, and in the last three months he says that the peculiar tremble in front of the left thigh has become jumping in character. The jumping is so severe at times when walking, he is compelled to stand still and for several moments hold firmly the muscles, with the left thigh flexed on the abdomen and the leg flexed on the thigh, before he can continue further.

When lying down he must be careful to keep the "knee bent" or the jumping will begin. He can only rest, as he expresses it, "curled up," and not able to sleep on his right side at all.

Patient lost about forty pounds in the last eight or nine months; appetite fairly good.

There is no history of bladder or rectal disturbance.

*Inspection.*—The patient's expression indicates long suffering and anxiety. A well marked eruption is seen distributed over the face and body, which is iodism.

On standing, the patient rests his weight on his right leg, with his body leaning to the right side and abducts his left leg and foot with his toes resting on the floor, relaxing as much as possible the muscles of that leg.

On sitting down, he puts his hands on the arms or seat of the chair, cautiously and easily letting himself down, leaning to the right side and continuing to support the body with his arms.

His gait is cautious; none too steady; and not spastic.

When first examined there was marked clonic contractions of the

quadriceps extensor of the left leg alone, but now of the right quadriceps, together with the glutei adductors and "ham-string" muscles of both sides. [Have left a fuller report of the findings of the nervous symptoms to Dr. William W. Graves, and will refer to them later.]

*Posterially.*—When the clothing is removed there is noticed an exaggerated teamster's curve (kyphosis); from the history of having worn shoulder braces, it is believed he has had this from boyhood; patient thinks, however, that he has become much more stooped of late. There is also a scoliosis, of which he has been unaware until a recent date. The upper curve extends from the spine of the fourth dorsal vertebra to the spine of the twelfth; the lower curve from the spine of the twelfth dorsal vertebra to the spine of the first sacral vertebra.

In the concavity of the lower curve, and to the left of the bodies of the lumbar vertebræ, is seen a large pulsating tumor projecting out between the bony landmarks, filling the entire space; bounded above, by the left twelfth rib, to the right, by the lumbar vertebræ, below by the superior border of the left crest of the ilium.

In the dorsal region, between the fourth and the twelfth, spinous processes is noticed a slight fullness.

*Anteriorly.*—Is noted some enlargement of the left abdominal side, including the left hypochondriac, umbilical, iliac and lumbar regions, which can be seen to pulsate.

*Palpation.*—With the right hand over the left lumbar region, and the left hand on the upper iliac or umbilical region, making steady, gentle



pressure, a tumor of considerable resistance is felt conveying a marked forcible expansile impulse, synchronous with the heart beat; also on the left side of the dorsal vertebra from the fifth down, quite a little resistance is felt. On the right tenth rib is a well marked bony prominence, showing a previous fracture which the patient, although unaware of it, more than likely received during the injury.

The heart sounds are clear, forcible and regular, with the apex beat at the lower fifth interspace in the mammary line. The carotid artery has a peculiar recoil. The femoral arteries can be felt to pulsate on both sides and are very weak; likewise the dorsalis pedis.

*Percussion.*—Posterially, to the left of the third spinous process of the dorsal vertebra there is dullness of about one finger's breadth; just below, on a line with the fourth dorsal spine, the dullness is two finger's breadth, steadily increasing to the eighth spinous process, where it is four finger's breadth. Below this point there is relative dullness over Traube's area. Swinging to the left complete dullness is found over the ninth intercostal cartilage, which can be traced downward just to the left of the umbilicus and linea alba below, to a plain midway between the anterior superior spine of the ilium, and the spine of the pubes.

You will see on the patient, when he is presented, dotted lines indicating the dull area.

*Auscultation.*—A distinct bruit is heard over the entire dull area, except Traube's space.

By the physical signs an elliptical

shaped tumor is made out, with its long diameter downwards, a little forwards and outwards.

Measurement, approximately of the long diameter of this tumor is seventeen to eighteen inches; the short diameter about eleven and one-half to twelve inches.

Dr. Graves' report on the examination of the patient's nervous system is as follows:

*"Cranial Nerves Show Normal Functions.*—There is coarse tremor in slightly closed lids, in protruded tongue, in lips when patient shows teeth and when talking, in fingers when separated. McCarth's reflex and "jaw jerk" are active. Quinquaud's symptom of phalangeal crepitation is present in fingers of both hands.

The motility of neck and upper extremities during active and resisted movements is entirely normal. Passive movements reveal no rigidities in these parts. The muscles and accessible nerve trunks of upper extremities are not tender to pressure. Radial and triceps reflexes are rather exaggerated on both sides, but no difference is apparent between right and left.

Rombergism is not present. The gait is neither ataxic nor spastic, but it is notably careful and the trunk is kept in a rather fixed position and inclined rather slightly toward the right as patient walks to and fro through the room.

When standing, the weight of trunk is invariably shifted to the right lower extremity, while the left assumes a position of slight flexion at hip and knee, with foot turned outward and resting easily on toes. Then patient

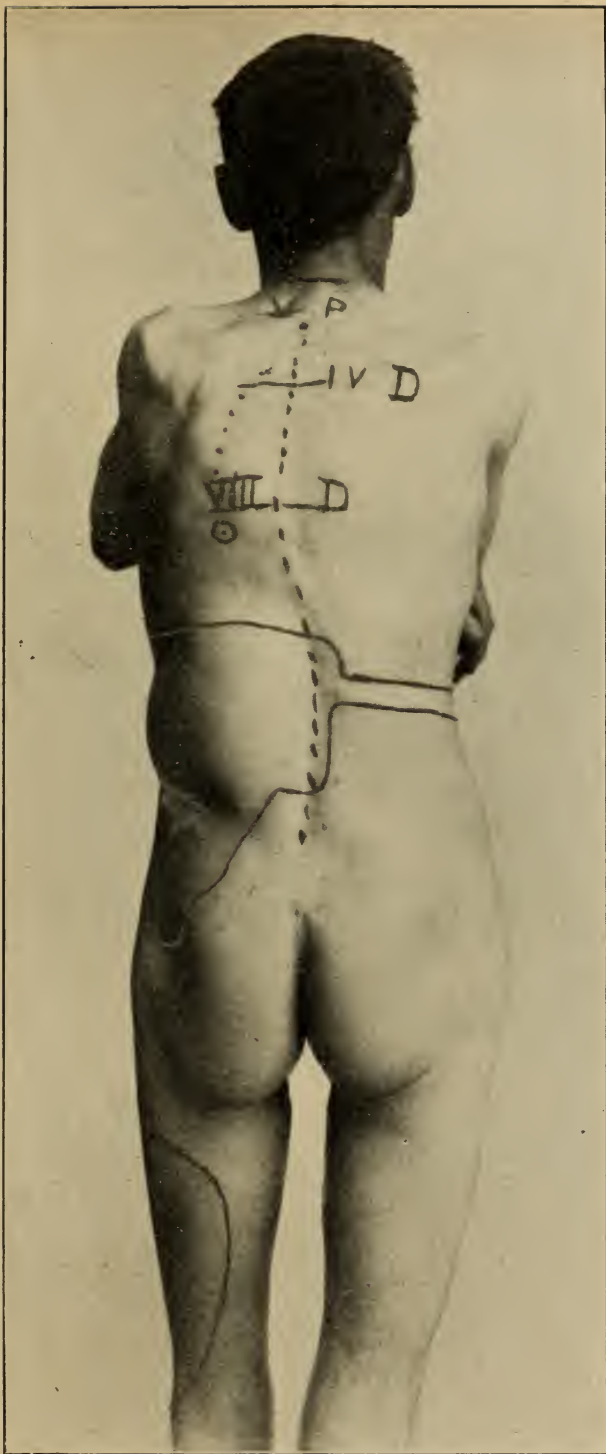


FIG. 1.—V. P., vertebra prominens. IV D, fourth dorsal spine. VIII D, eighth dorsal spine. Dotted line to left of dorsal vertebrae—superior external border of the aneurism. ○ Beginning of Traube's relative dullness extending to ninth intercostal cartilage. Black lines on trunk—hyperesthetic area, upper left side corresponding to distribution of the seventh spinal segment; lower to left ilio-hypogastric nerve. On right, distribution of the eighth spinal segment. On the left thigh, at first hyperesthetic, afterwards hypoesthetic area corresponding to distribution of the external cutaneous femoral nerve.

stands firmly on both legs, constant clonic contractions soon become visible in the quadriceps and adductors, and after a few minutes similar contractions may be seen in "ham string" and "calf" muscles of both extremities. Upon lightly grasping the circumference of either thigh with both hands this clonic spasm of the muscles may be felt as rapid and rather uniform contractions.

The fifth, sixth and seventh dorsal spines are tender to firm pressure, especially the fifth, sixth and seventh. The seventh and eighth are rather more prominent than the adjacent spines above and below, and the eighth shows the greatest deviation from the median line.

The dorsal kyphosis likewise reaches its greatest height at about the eighth dorsal spine. Coughing or sneezing, or sudden jars, as in walking, are said not to cause pain in spine; neither does suddenly applied pressure to top of head or to shoulders provoke pain. When a test tube containing hot water is slowly drawn downward over the spinous processes patient cries out with pain when the fifth dorsal spine is reached. The pain thus provoked is said to be equally intense when the hot tube is placed over the sixth and seventh spines. A similar test with a Faradic current of moderate intensity gives similar results. The spine is held in a fixed and rigid position, whether patient is lying, sitting or standing.

There are no muscle atrophies about lower extremities, and joint excursions are normal, both to voluntary and resisted movements. There is no difference between right and left as regards muscle strength, and the same

is in proportion to muscle volume.

Passive movements reveal a decided spasticity in the quadriceps muscles, less in the calf muscles, and still less in the adductors. The knee jerks are equal but enormously exaggerated, the slightest taps are sufficient to set up "clonus" in the quadriceps muscle. Patellar clonus is readily obtained on both sides. The Achilles jerks are likewise exaggerated, but less active than the knee jerks. Ankle clonus is present on both sides, but is *not* decided. Plantar reflex normal. Babinski's and Oppenheim's reflexes are absent. The cremasteric reflex is absent on the left, present on the right. The abdominal reflexes are present and active in lower and middle divisions, but in upper divisions are very weak, and at times not obtainable.

A sensory examination of trunk reveals a zone of hyperesthesia about one inch wide extending "girdle" fashion about trunk and corresponding approximately to the skin distribution of the seventh dorsal segment on the left, and the eighth dorsal segment on the right. This zone corresponds accurately to the location of the girdle sensation, of which the patient has complained from time to time. Sensation is nowhere diminished below the zone. On the right the lower margin of this zone can be as accurately determined as the upper margin. On the left, the lower margin of this zone becomes united laterally and posteriorly with, and cannot be separated from, the upper margin of a hyperesthetic area, which corresponds roughly to the outlines of the tumor.

Still another hyperesthetic area is



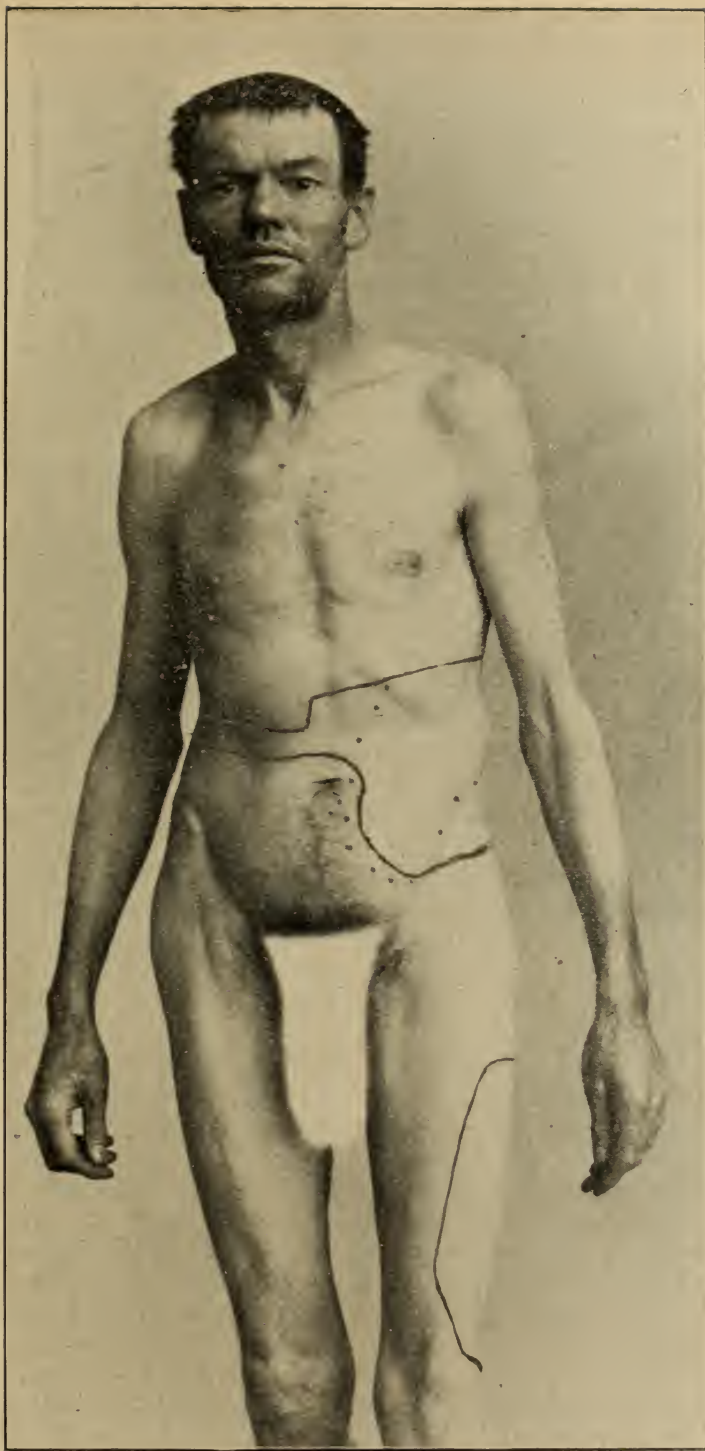


FIG. 2.—Dotted lines, outline of tumor. Black lines, as described in figure 1.

found on the outer surface of the left thigh, corresponding closely to the distribution of the external cutaneous femoral nerve. The hyperesthetic zones and areas are outlined on the patient's body and are best studied by inspection. Within the areas thus outlined hyperesthesia is present to pinpricks, temperature and "touch."

The sensory findings just read were obtained November 8th, and on the morning of November 9th, the patient stated that he had suffered no pain in left leg during the night. In going over the sensory examination again, the findings were the same as on the 8th, excepting within the distribution of the external cutaneous femoral nerve, where pinpricks were scarcely perceived as such. Touch was not perceived as acutely as in adjacent skin, but temperature hyperesthesia was still present.

A third sensory examination, made November 10th, revealed the findings to be practically the same as on the 9th. The patient has not had a recurrence of pain above outer surface of left thigh.

A consideration of the objective findings alone afford ample evidence upon which a diagnosis of both central and peripheral involvement of the nervous system may be made.

The objective findings indicating involvement of the spinal cord are:

1. The zone of hyperesthesia extending about the trunk corresponding to the segmental distribution of the seventh dorsal nerve on the left, and the eighth dorsal nerve on the right.

2. Decided and visible clonic spasm of muscles of lower extremities when patient is standing.

3. Exaggeration of knee jerks and Achille's reflexes, with patellar clonus and ankle clonus.

4. The decided spasticity of quadriceps, "calf" and adductor muscles as elicited by passive movements.

5. Tenderness to pressure over fifth, sixth and seventh dorsal spines and the pain provoked by the application of heat or Faradic current to these spines.

6. The decided weakness and failure at times of the upper abdominal reflexes.

The upper level of the cord lesion probably corresponds to the fifth dorsal segment and should therefore be found opposite the sixth dorsal spine.

The lesion up to the present moment is undoubtedly slight in character—probably slight pressure—since all signs are absent indicating a severer lesion.

The objective findings indicating a disturbance in peripheral nerves are:

1. A sharply defined area of hyperesthesia, corresponding to the distribution of the left ilio-hypogastric nerve.

2. A similar area corresponding to the destruction of the left external cutaneous femoral nerve.

3. Absence of the cremasteric reflex on the left.

These areas of hyperesthesia and absence of the cremasteric reflex on the left, are probably due to direct and gradually increasing pressure on certain nerves by the lower part of the tumor. The assumption of such pressure finds justification in the striking change from *hyperesthesia* to *hypoesthesia* in the external cutaneous femoral nerve, which occurred during

the night between the 8th and 9th of November."

*Summing Up the Case.*—Abdominal aneurism is very rare in comparison to the thoracic aneurism. Osler says: "Of the 468 cases of aortic aneurism at St. Bartholomew's Hospital, twenty-three involved the abdominal aorta, also the sac is most common just below the diaphragm in the neighborhood of the celiac axis."

There can be no doubt as to the diagnosis with a definitive tumor, which can be grasped between both hands and felt the pathognomonic symptoms, viz., the expansile pulsation.

The *etiology* of this case points to *trauma*, with the negative history of rheumatism and syphilis—and in view of the fact that he has had more or less pain in the left lumbar region since the injury.

Trauma is given as one of the etiological factors in aneurism in general, but nowhere has the writer been able to find one single case where trauma was given as the direct cause of an abdominal aortic aneurism. Our text books have little or no data on this subject except what "may be" or "may cause."

Babcock on "Diseases of the Heart and Arterial System," devotes no space to the abdominal aortic aneurism, and the only mention is given under etiology. In substance he thinks it possible, but not probable, that trauma could directly cause an aneurism in this locality, but suggests the idea those aneurisms attributed to trauma in the descending aorta when associated with a fall, may be due to the sudden rise of blood pressure

which may rupture the inner coat of the vessel, and thus become indirect.

In this case it is believed to be a direct traumatic aneurism, but to definitely state where this immense tumor first began would only be a presumption.

The resultant nervous symptoms show how much irritation it has already caused.

The nervous symptoms of irritation, both centrally and peripherally, go hand in hand with the physical signs, viz.:

1. The central irritation which is located at the fifth, sixth and seventh dorsal vertebræ with the area of dullness and the bruit in close proximity.

2. The protrusion in the left lumbar region, with the compression of the peripheral nerves.

#### DISCUSSION.

Dr. Wm. W. Graves said there was absolutely no doubt but that his findings indicated two distinct lesions of the nervous system in Dr. Goodloe's case—the one due to direct pressure upon peripheral nerves by the aneurism; the other to slight pressure on the spinal cord, the latter being probably caused by erosion of vertebræ in the mid-thoracic region.

Dr. Sidney I. Schwab called attention to the fact that the observation in this paper may be of considerable value in helping to establish the accurate localization of the upper abdominal reflex. He had been especially interested in studying this reflex, and in a recent case of fracture of the spine Dr. Bartlett and himself had been able to find localizing data which tended to confirm the findings of Dr. Graves. The three reflexes compos-



ing the abdominal reflex would be of some utility as a localizing sign if each of them could be assigned to separate segments in the spinal cord. The usual localization of the whole of the abdominal reflex was given as the fourth to the tenth or eleventh thoracic segments. In cases in which the two lower reflexes were lost and the upper was present, and in addition it was feasible to determine the probable localization of the lesion by means of the sensory segmentary deviation from the normal, then it is possible to limit the upper line of the lesion in the spinal cord. In the case seen with Dr. Bartlett, in which, as in this case, the upper reflex alone was present, it was possible at the operation to localize the upper abdominal reflex at the tenth dorsal segment. The findings in these two cases seemed to indicate that the localization here obtained might be of some use in the future.

Another point in the report of this case of great interest to the neurologist was the assumption almost necessary that there were two sources from which the symptoms might arise—a central and a peripheral one. The sensory disturbances on the thigh could not be explained except by assuming that the growth was multiple. This always carries with it a certain amount of danger. In this case, however, it seems clear that there were two different sorts of pressure—one producing the peripheral symptoms and one the central group of symptoms. Another point of great interest was the fact that there was at first a hyperesthetic area on the thigh which, later, gave place to an anesthetic area in the course of a few

hours. Dr. Graves' idea was that in such a case the pressure at first caused pain, which afterwards gave place to the anesthesia owing to the degeneration of the nerve. This is ingenious enough to warrant some consideration. However interesting this case might be from the clinical point of view the neurological data deserved attention. In all lesions of the abdominal or thoracic cavity even remotely affecting the spinal cord, the neurologist should be given the opportunity of collecting the data in order to increase the number of facts which supported more accurate localization in the spinal cord. S. Weir Mitchell has emphasized the importance of this over and over. It is only by constant repetition that the facts so observed can be made use of in the diagnosis and the localization of pathological processes in the spinal cord. This is an ideal case showing how the neurologist and the internist, working together, could obtain so valuable a lot of data referring to the possible localization of the upper abdominal reflex in the spinal cord.

Dr. Goodloe, in closing, said that the etiology was interesting to him, as well as the nervous side of the case, on account of the scarcity of data in the traumatic aortic aneurism and in view of the fact that most injuries of so severe a character had been sufficient to cause death. In this instance the weight of the lumber which fell upon the man must have been sufficient to break the rib by indirect violence, yet not enough to fracture the vertebral bodies. The pathology was wholly speculative, but a point or two might lead to the belief that this was a sacculative tumor

wholly on the left side. Another interesting point is the scoliosis. The patient had not noticed this before the injury, and the question may arise, is it due to pressure of the tumor directly upon the spinal column, or did the patient acquire it from the position he assumed because of pain?

## PRESENTATION OF SPECIMENS.

### ANEURISM OF THE AORTA—DR. ERNST JONAS.

I thought you might find it of interest, in connection with this paper, to look at a specimen of abdominal aneurism which we acquired about eight months ago at an autopsy. A lady came to Dr. Tuholske's office, saying that operation had been recommended for retroflexed uterus, and asked if the operation were advisable. We found the classical signs of fixed retroflexed uterus, and, at first, were inclined to say, "Go ahead and have the operation done," but, on further examination, we found in the epigastric region a tumor larger than the fist. It was pulsating and showed all the signs of an aneurism. The question was, where was that aneurism located? Was it in the aorta or in one of the branches of the aorta; probably one of the branches of the celiac? Or might it be a tumor closely connected with the aorta, getting the pulsation from the aorta? Against this supposition were the bruit and other signs we find in aneurism; so we made a diagnosis of aneurism, leaving doubtful only the location. We recommended an exploratory laparotomy, hoping it might possibly be an aneurism of one of the branches of the celiac, perhaps

in the omentum, which we might remove *in toto*, or perhaps an aneurism of one wall of the aorta, in which case we might cut down upon the sac and restore the aortic artery to its normal size, after making the aorta temporarily bloodless. This was mentioned as a possible, but untried, method by Mattas.

A few weeks before this case came to our attention, Dr. Tuholske had successfully performed such an operation for a femoral aneurism. After opening the abdomen he found an aneurism of the aorta closely adherent to the neighboring organs. Dr. Tuholske considered it inadvisable to explore further, and the abdomen was closed. Several weeks later the patient died suddenly. At autopsy we found this aneurism about three inches above the bifurcation of the common iliaes, and a very large retroperitoneal hematoma.

### ANEURISM OF AORTA—DR. JOHN C. MORFIT.

In connection with the paper I wish to present a specimen of aneurism about the celiac axis. The patient, a man about forty years of age, had been in one of the hospitals of St. Louis for some time, and was supposed to be hysterical or a morphine fiend, as he was constantly asking for sedatives to relieve his real or imaginary pain. He entered Mullanphy Hospital, where he came under my care. When I first saw him he was having a kind of violent colic, and was asking for morphine. He had an expression of pain, which seemed to be half real and half imaginary, but there were enough abdominal symptoms to make sure that there was

some physical ground for the complaint. Pain and tenderness were everywhere present. After going over him I concluded it was either appendicitis or some renal condition, and I sent him to the genito-urinary department. They promptly excluded the possibility of any renal involvement, and he was returned to the surgical department. About twenty-four to forty-eight hours after the ureteral catheterization there was a very definite right inguinal tumor noticeable, and we decided to do an exploratory operation, as it looked like appendicitis. There was a slight swelling in the median line between the zyphoid and the umbilicus, and also a dull percussion note high above the hepatic line in the right thorax. These were only significant in view of the conditions we found later.

We put him on the table, and before I had cut through the peritoneum I found a blood clot. The peritoneum was extremely pale. There was no appendicitis. My impression was that there had been some injury to the ureter, which seemed to be in a tube of blood clot about two inches in diameter. The perirenal fat seemed partly digested, and was in a mass of blood clot twice or three times the normal size of the kidney. While exploring there was a rush of blood, not a great quantity, and the patient suddenly died. This hemor-

rhage on the table was less than I have frequently experienced with safety, but, in addition to the pre-operative hemorrhage, was sufficient to cause collapse. I continued the exploration, and under the peritoneum and all around could be seen ecchymoses, but there was no blood in the peritoneal cavity. Between the liver and the diaphragm I found a mass of blood clots as big as a man's head. Then we began to suspect the origin of the condition, and upon following up the abdominal aorta this aneurism of the celiacaxis was found. The condition had been going on a long time; the dissecting fluid had gone down along the ureter and around the bladder, and up the ureter on the other side, besides separating the muscular layers of the abdomen, so that the amount of suffering the man had endured can only be understood when we take into consideration the enormity of the hemorrhage.

In regard to the etiological factor of trauma in these cases, it seems to me, in the light of the frequency of rupture and injury to the viscera without any apparent injury to the abdominal parietes, that it is not going too far to suppose there might be some rupture of one or more of the vessel walls as easily as of the kidney, spleen or intestines by a similar force.



## NEURASTHENIA; ITS COMPLICATIONS AND TREATMENT.\*

BY JOHN PUNTON, M. D., Kansas City, Mo.

*Historical Data.*—The term neurasthenia was supposed to have been first used by Dr. Beard, of New York; in describing a general morbid weakness or exhausted state of the nervous system. The existence of the affection, however, was hinted at as early as the fourteenth century by European medical authors, but whose views and opinions were rendered wholly impractical by virtue of their obscure theoretical speculations, and nothing of a tangible scientific character was forthcoming, relative to neurasthenia until the appearance of Beard's famous monograph in 1869. Later investigations, however, revealed the fact that his claim to priority in the use of the term was an erroneous one. To Dr. VanDusen, of Kalamazoo, Mich., belongs the honor of having used it as early as 1867 in his valuable paper entitled "Observations Upon a Form of Nervous Exhaustion or Neurasthenia culminating in Insanity." It has since been shown that neither of these physicians invented the term, as it can be found in Dunglison's Medical Dictionary published in 1833.

Notwithstanding these facts, the medical profession is under lasting obligations to Dr. Beard for the persistent manner in which he emphasized the importance of its study, thereby acquiring for himself an enduring monument in medical science. Prior to his labor in this direction,

much confusion prevailed in the interpretation of a large group of symptoms which were fundamentally dependent upon a morbid weakness of the nerve centers, but which had been previously ascribed to diseases of various visceral organs involved, such as perverted conditions of the kidneys, liver, stomach, uterus, and other organs implicated in the pathologic process. The result of Beard's work, however, led to a more thorough systematic study of its pathogenesis, and the conclusion so far reached warrant the assertion that the term expresses an affection which does not limit itself to any part of the nervous apparatus, but affects it as a whole. Hence it is an extremely generalized condition, and often found associated with both functional and organic diseases.

Its extremely generalized character may therefore affect the brain, spinal cord, peripheral nerves, the visceral organs, and indeed all parts of the human organism subject to nervous innervation. Consequently its symptomatology is exceedingly extensive and varied. This wide range of involvement has led to much confusion and is the responsible agent for the vague ill-defined notions entertained by many concerning the true nature and character of neurasthenia; some physicians even going so far as to deny its existence altogether as a clinical entity.

*Definition.*—Laying aside, however, all controversy, the consensus of opinion to-day by those most competent to speak, declare that neuras-

\*Read at the annual meeting Missouri State Medical Association, Excelsior Springs, May, 1905.

thenia in its quintessence is a true fatigue neurosis characterized with an increased morbid reaction of the ganglionic nerve centers to all kinds of impressions, both mental and physical, whether slight or profound, producing an excessive nervous weakness and nervous irritability, which constitutes its chief cardinal symptoms.

*Classification.*—Moreover neurasthenia is variously classified by different authors according to its etiology, symptomatology or the apparent seat of lesion. Hence we may have cerebral, spinal, traumatic, sexual, toxemic, reflex and many other forms of the disease. While no doubt this method has some advantages, yet it often proves very confusing and somewhat misleading.

A classification that recognizes neurasthenia in its entirety is to my mind, therefore, much preferable, and from this standpoint it can be reduced to two classes, viz., *complicated* and *uncomplicated neurasthenia*. In the former it may be found associated with any functional as well as organic disease, such as epilepsy, syphilis, malaria, gout, rheumatism, uterine disease, sexual perversion, hypochondria, dementia præcox, melancholia, paranoia, and other forms of insanity. In the latter class it presents itself by a conspicuous absence of any such complications, in which case it is known as *simple or uncomplicated neurasthenia*. The effect of either class, however, produces symptoms as we shall presently see, which may be referred to both the physical as well as the mental constitution of the individual, and present a wide range of clinical phenomena which for the

most part is subjective in character.

*Etiology.*—While the causes of neurasthenia are both predisposing and exciting, recent investigations demonstrate that for its production two conditions are indispensable, viz.: a relative vulnerability of the organism and a noxious agent of some kind. These two etiologic factors vary enormously in their influence in different persons; sometimes the one predominates, sometimes the other, but usually they are more or less combined. It is clear, however, that the element of antotoxemia enters largely in its production, giving rise to tissue changes that are commonly found associated with its known pathology. Its common association with gastro-intestinal disorders and occasional prolapse of the various abdominal organs led "Glenard" to add enteroptosis as an etiological factor, while "Dunton", has recently emphasized its close relation to cardiac disease.

The continued result, however, of nerve strain from any cause that forms so prominent a factor in American business, social, political and professional life, operates upon the physical and mental organization in such a manner as to exhaust strength or vital force more rapidly than recuperation takes place. Consequently nervous exhaustion or neurasthenia ultimately ensues. More especially is this found to be true of persons inheriting a neurotic diathesis, as this renders them more susceptible to the baleful influence of the common causes of neurasthenia. Indeed, heredity plays a very conspicuous part in its pathogenesis, as a very large proportion of those who suffer from



neurasthenia are found endowed with a hypersensitive nervous organization which can be directly traced to transmitted neuropathic taints. Excess and abuse of all kinds, with faulty methods of living, operating upon such an individual are recognized by all authorities to be potent factors in its production. The presence of known hereditary defects, however, is not always essential to the diagnosis, as the causes of neurasthenia are known to be both congenital and acquired.

*Symptoms.*—That the cardinal symptoms of neurasthenia present well marked evidences of weakness and irritability of the ganglionic nerve centers, which in themselves are expressive of fatigue, is now a well established scientific fact. Weakness and irritability of the nervous mechanisms that preside over the various bodily organs are, therefore, the chief clinical phenomena belonging to any and all varieties of neurasthenia. These may present themselves in all degrees of intensity and are usually accompanied with other symptoms, which denote the particular functions of the nervous system that are involved in the process. Hence, we may have disturbances of the motor, sensory, reflex, trophic, secretory, visceral and psychical mechanisms which furnish a wide and varied range of clinical phenomena. But it matters little what part of the nervous apparatus is included in the pathological process, the two dominating factors that are present and common to all varieties, and that which defines neurasthenia as a distinct clinical entity are weakness and irritability

of the various nervous functions involved.

*Pathology.*—While it is true that much speculation has been indulged in relative to its pathology, we are still compelled to admit that so far we are unable to positively declare what the actual pathological changes of the nervous elements are in neurasthenia. The two important symptoms, viz.: morbid irritability and morbid weakness of the nerve centers, however, have been shown by "Hodge" to be due to changes in the nerve cell itself, and that the lesion of fatigue is a loss of cellular substances involving the nucleus protoplasm, and even the capsule itself. According to Dercum, this waste of nerve substance has been demonstrated by "Mosso" to alter the constitution of the blood, producing a true toxemia that strongly inhibits the physiologic action of the nervous elements distributed to the voluntary muscles and other organs of the body.

"Abrams," in his recent publication, claims that defective energy from any cause leads to abdominal venous congestion tantamount to asphyxiation of the abdominal viscera, diminishing their vital tone and resistance producing toxic products, which have a specially poisonous influence upon the sympathetic nervous system which leads to the occurrence of not only nervous exhaustion, but also attacks of the "blues," which often amounts to true melancholia. "Savill," who has thoroughly investigated the pathology of neurasthenia, leads him to believe that it may arise under four different pathological conditions, viz.:



*First.*—Toxic blood states, which include the neurasthenia which supervenes on, and is associated with, prolonged gastric disorder and constipation. This he calls *toxic neurasthenia*.

*Second.*—Malnutrition of the nervous system which arises in various debilitated conditions, or *malnutrition neurasthenia*.

*Third.*—Over-functioning or fatigue of the nervous system, such as may arise in all exhausted states, or fatigue *neurasthenia*.

*Fourth.*—Emotional shock or strain including traumatism.

By far the most frequent form, he claims, belongs to the first class or as due to toxemia, the resulting neurasthenia often arising as a consequence of disordered digestion.

The reduced nervous energy which results from any of these conditions seriously affects the visceral organs and nutritive functions of the body, and are clinically expressed by a marked weakness or inaction, as well as want of vigor of the various somatic processes. A feeling of bodily weakness or illness is thus engendered, which attracts the attention of the patient to himself, giving rise to morbid introspection and suspicious fear which later form the basis of all the various forms of nosophobia. This pathophobic tendency also leads to the development of despondency, petulance, selfishness, irritability, moodiness, hilarity, indecision, doubt and vacillating conduct, all of which are marked features in the incipient or formative stages of insanity.

*Complications.*—The close relation which exists between neurasthenia and insanity, therefore, cannot be

overestimated; indeed, the kinship one bears to the other is often so closely allied as to almost establish a true equivalency. This clinical fact, although first recognized by Van Dusen, was again emphasized by myself in 1898, before the American Medical Association, but its true value and practical significance has failed to be sufficiently impresssd until the recent able article published by Dana, entitled "The Passing of Neurasthenia," in which Dana not only urges upon the medical profession the extreme relational importance of neurasthenia and insanity, but also differentitates the chief clinical characteristics of these minor psychoses. To use his own language, he contends that "a large number of the so-called neurasthenias and all the hysterias should be classed as prodromal stages, abortive types or shadowy imitations of the great psychoses, for in these cases it is the *morbid mind* that dominates the situation, not a weak eye muscle or a poor stomach, a heavy womb, uric acid, arterial sclerosis, or even an exhausted motor nerve cell. They are not often, to be sure, pure psychoses, for the body is also at fault, but the psyche is in main control and it gives the stamp to the clinical syndrome, directs the prognosis, and most acutely solicitates the treatment."

The practical clinical value and significance of the attitude thus assumed by Dr. Dana can readily be understood by those who come in daily contact with persons said to be suffering from the various nervous disorders, while his claims are amply sustained and justified by my own college and hospital clinical experi-

ence, as well as by the case records of those admitted to my private sanitarium. In our admissions to the hospital it is the rarest exception to find a pure, unadulterated or uncomplicated case of either neurasthenia or hysteria; indeed, they are in my judgment comparatively rare conditions. The vast majority said to be suffering from these nervous affections when admitted are found, upon further examination, to be afflicted with a true psycho-neurosis, which we sometimes designate as psychasthenia, or perhaps could more properly be termed psychosomatasthenia.

While the so-called neurasthenias are not true insanities, nevertheless such persons are not endowed with perfectly normal minds, and their maladies and sufferings are largely due to the mismanagement of their mental faculties rather than their bodies, hence nervous prostration is often a polite misnomer for insanity. It is this disturbance of mental equilibrium, therefore, that constitutes the dominating feature of the various psycho-neuroses which so often pass for neurasthenia and hysteria.

Associated, however, with the abnormal psychological manifestations, neurasthenia may be complicated with many functional as well as organic diseases, more especially perhaps those affecting the normal functions of the heart, lungs, liver, stomach, intestines, kidneys, bladder, the sexual organs, and other parts of the body including the special senses in varying degrees of seriousness and which may have arisen primarily as the result of some intrinsic or extrinsic morbid influence or physical deformity. Whenever such condi-

tions, however, are present, they represent true complications of neurasthenia and are not essential features of its clinical entity, while their removal by any form of treatment and more especially by surgery is not sufficient in itself to effect a cure.

This latter remark needs emphasis, for I am certain that too much is often promised, for the operation and even when skillfully performed, utterly fails at times to yield the promised results which in turn proves a sore disappointment to the patient as well as the friends and the additional etiologic factor of trauma being added, speedily tends to aggravate the former mental condition of the neurasthenic state.

The removal, therefore, of an ovary, the repair of a lacerated perineum or cervix, the local treatment of the various uterine inflammations, the fitting of glasses for eye-strain, the removal of an adenoid growth, or even the various operations for enteroptosis, do not in themselves suffice to relieve the morbid doubts, fears, or imperative concepts and other purely psychical manifestations of so-called neurasthenia. Such operations and treatment, while occasionally, perhaps are imperatively demanded, yet at best they are simply means to an end and are only effective when combined with suitable measures to restore the distorted mental equilibrium. Radical surgical operations are therefore rarely indicated in the treatment of neurasthenia, for in the vast majority of cases the subjective complaints of the patient referred to the pelvic viscerae are in large measure false alarms, the product of a morbid mentalization



for the relief of which surgery is contra-indicated.

*Diagnosis.*—As an aid to diagnosis it may prove useful to state that neurasthenia, strictly speaking, rarely occurs under twenty years of age; what we usually see then, before this age, is pseudo-neurasthenia, which includes the early stages of dementia-precox, manic depressive, insanity or some early development of phrenasthenia, which term Dana prefers to use for hysteria. After the age of twenty, however, we are more apt to encounter the incipient stage of manic depressive insanity, incipient paresis, toxic and confusional psychoses, following severe illnesses, hypochondria and paranoia, all of which are commonly diagnosticated as neurasthenia.

One of the earliest and most important signs of neurasthenia becoming complicated with mental disorder, is the persistent manner in which the feelings, thoughts and actions of the individual absorb his entire attention. Indeed, this morbid self-consciousness or introspection is the usually marked feature of many of the so-called neurasthenias, but which really betrays the more serious pathogenic invasion of the higher mental faculties, thereby establishing a true psychosis instead of neurosis. Moreover, this morbid watching of self or egosim is usually clinically expressed in a general feeling of anxiety, distrust or suspicion, which later leads to morbid doubts and fears, and sometimes to impulsive acts which constitute the various obsessions, impulsions, imperative concepts and fixed ideas of true insane

delusions, which may later lead to suicide.

These complications, however, present themselves in all degrees of intensity and irresistibly force themselves upon the patient, thus dominating his every thought, word and deed. Unfortunately, too often the close relation which exists between neurasthenia and insanity is entirely overlooked, and even ignored. Consequently many a curable case becomes incurable by failure on the part of the physician to recognize its true mental nature and character. Moreover, its kinship to hysterical states often leads physicians to treat it with contempt, under the mistaken idea that the barometric changes from day to day indicate a fraudulent basis. Nothing could be further from the truth, as there is plenty of evidence in every genuine case of neurasthenia and hysteria to explain their fluctuating tendencies.

It would, however, be sad indeed if, with all the boasted advance which medical science has made within the past decade, nothing more than a name or diagnosis, coupled with a bad prognosis, could be offered those unfortunate sufferers. Fortunately, it is just at this point where the results of modern medical research comes to ours as well as the patient's rescue, by indicating in no uncertain manner the means and methods by which they may escape their pathologic thralldom. Hence the crowning glory of modern medical science consists in demonstrating that its tenets are sufficiently able to offer to all such sufferers partial, if not complete, redemption from their affliction, provid-



ing they are willing to strictly obey its therapeutical precepts.

If, at a conservative estimate, 30 per cent. of actual insanity is curable, we can declare without any hesitation that at least 75 per cent. of these minor psychoses are also curable, providing we recognize early the special organ which is most in need of appropriate therapeutic attack. Unfortunately, it is the failure to discover early that in nearly all such cases we are dealing from the start with a psychosis instead of a neurosis, and this mistake so often proves disastrous to the patient. While, therefore, we procrastinate or wait for further developments, the disease itself not only becomes more confirmed, but actually incurable, in spite of the use of all our temporary expedients.

*Treatment.*—In the foregoing text we have thus endeavored to show that neurasthenia, in a strictly technical sense, is a comparatively rare affection, but that the *conditions so diagnosed* are more often morbid mental states with physical expression, thus constituting true psychoneuroses, which in themselves are often the forerunners of actual insanity. In its treatment, therefore, we are of necessity compelled to recognize the morbid mentality of the patient as the primary essential element underlying the various abnormal clinical phenomena. Hence, to be of value, our therapeutics must necessarily take cognizance of any and all measures that not only appeal to, but tend to strengthen the various sub-forces of the mind, as well as the correction of faulty functionalization of the various somatic processes which may result from abnormal conditions of inheritance, im-

perfect growth, defective nutrition, incorrect habits, injudicious education, accidents and injuries, acute diseases, faulty elimination, sexual excesses, mental and physical strains and shocks of all kinds.

In spite, however, of the numerous physical infirmities associated with these various psycho-neuroses, I repeat, the dominating pathological factor, and that to which all others are subservient, is the morbid mentalization of the patient. For the relief of these psychical defects nothing short of *education or pedagogical* measures, combined with rest, are found to be effective. These have for their special purpose the dissolution of the pathogenic ideas pertaining to self and surroundings and the substitution in their stead of healthy mental processes of thought, speech and conduct.

In order for this, the full confidence of the patient must be secured, a task not always easy. And the peculiar mental traits and characteristics carefully studied, which also indicates to the physician not only the nature and character of the new ideation to be established, but also the method of their creation as well as their special cause. To favor the accomplishment of this purpose, the early rigid isolation from home, combined with partial or complete rest, are, in my experience, the most essential curative principles.

The separation from home and relatives, however, often proves to be the most formidable obstacle for the family physician to overcome in enforcing the most approved and scientific modern methods of treatment. All authorities agree that the full control of the life and conduct of the

patient while undergoing treatment is absolutely essential for success, and the removal from home greatly simplifies this healthful expedient. Moreover, the home life, as a rule, furnishes a most fruitful soil for the cultivation and development of the two important evils, viz.: Indulgence and irritability, from which the patient must of necessity be wholly protected.

The numerous excuses of the patient, however, together with the earnest appeal of his friends, often cause the family physician to allow his sympathies to govern his better judgment by yielding to their desires, hence he is so often found compromising with those who believe in *travel* as the most efficacious remedy for such persons, or else he consents to act with those who have great faith in the curative value of certain springs, both of which agents have been carefully and critically weighed in the unbiased balance of modern medical science, and found not only wanting, but grievously disappointing and unworthy of confidence. Not unfrequently the family physician is compelled to listen to the wail of those who espouse the various fads and fakes of the day, like osteopathy, magnetic healing, dowieism, eddyism or christian science, all of which have for their basis the well-known principle of *suggestion* or psychotherapeutics, and which every first-class physician should employ as part of his scientific therapeutical armamentarium.

The essential qualities of mental suggestion should embrace measures intended to produce a new psychological birth or the conversion of the patho-

genic ideation into a normal or physiological process of thought, speech and conduct, which also includes improved methods of educational action. Used aright, it should, therefore, embody the inspiring influence belonging to hope, progress and co-operation, with sufficient force and power as to impress upon the mind of the patient the certainty of ultimate recovery.

This educational plan is also intended to strengthen the inhibitory powers, at the same time restore to the will its normal control of the emotions and intellect, thereby teaching the patient to become more self-dependent, self-confident, and self-reliant, without which all other methods of treatment are unavailing.

For the correction of the various bodily ailments associated with so-called neurasthenia, the judicious use of drugs are often indispensable. As a general rule, however, they are at best a very weak staff upon which to lean; indeed my experience proves that pharmacology, in spite of its marvelous modern developments, is sorely disappointing in the treatment of these various minor psychoses.

It is surprising, however, to find how heavily the average psychasthenic leans upon drugs for relief, and this bad tendency on their part becomes one of the most serious evils for them to surrender. As a general principle, the institution of a regular routine normal habit of life is far more important to establish in such persons than the continuous persistent use of drugs as temporary expedients for the relief of their fluctuating multiplicity of symptoms, as this routine drugging in due course



of time actually leads to the self-dosing habit, or patent medicine vice, which is the equivalent of true drug addiction.

In order, however, to aid digestion, improve assimilation, favor elimination, promote normal innervation of the visceral organs beside favorably appeal to the mind, many agents are employed, chief of which, perhaps, are judiciously selected drugs, hygienic surroundings, electricity, massage, hydrotherapy, employment of all kinds, calisthenics, special diet, amusements, and all forms of helpful suggestions. Surgery has also its legitimate place in the treatment of neurasthenia, and while it is true that such conditions are liable to be complicated with true organic diseases requiring surgical aid, yet I contend that surgery is rarely indicated in its treatment.

In conclusion I desire to once more emphasize the importance of the early recognition of these so-called neuroses as psychoses in their incipency and urge the necessity of prompt appropriate treatment, for upon these two factors hinge the favorable or unfavorable prognosis. Cases even with a marked hereditary bias may often yield brilliant results if the principles advocated in this paper be firmly and conscientiously carried out.

The physician that can best establish hope for fear, courage for despondency, satisfaction for disappointment, confidence for distrust, peace for obstinate hostility, harmony for discord, happiness for sorrow, and above all, health for disease, is he who most of all meets the numerous exigencies surrounding the average case of neurasthenia.

Gentlemen, may such a privilege as this be ours.

#### DISCUSSION.

Dr. D. S. Booth, of St. Louis:—In the main I concur in the views of the author of this able paper, hence I have little to say except by way of emphasis. The essayist has certainly not exaggerated the importance of his subject; in fact, that is scarcely possible, since neurasthenia is the most frequent, widespread and distressing disease in nosology. Its baneful influence is not confined to the patient himself, but extends to the home and often to the social sphere in which the patient moves. Its course, marked by exacerbations and remissions, is often accompanied by connubial unhappiness which may eventuate in estrangements and divorce, and if unchecked or not cut short by death from complications or intercurrent diseases, ultimately may lead to suicide or the asylum.

Prophylaxis certainly is proper and desirable, the ideal form of which not only begin in the nursery but extends to the ancestry; however, when this has not been practical and we are confronted with a fully developed, even deeply rooted case, we believe the prognosis most hopeful, as was expressed by the author. This is important in view of the belief that still exists in the minds of the public, and not utterly expelled from that of the profession, that many diseases of the nervous system are purely imaginative if not supernatural, and that their treatment is at best an admixture of guess and experimentation. The prognosis under favorable conditions should be no more unfavorable than



are functional diseases in general, with a relative duration, etc. Several years ago I wrote that "the neuroses were perhaps more amenable to treatment than any other class of diseases," and an increased experience has not changed that opinion. That recovery is frequently slow and eventful is due to the nature of the disease, and the fact that it affects the fountain head of animal dynamics, the result of which is a weakened volitional control, enfeebled circulation, impaired digestion and defective excretion. In other words, the storage battery of physical and mental energy is low, the generators are defective, insulation imperfect, with a constant supply of power to maintain. Is it a wonder, then, that treatment in the beginning is often tentative, and that progress is slow and irregular? That the term neurasthenia appears to be used indiscriminately is due largely to the many and varied functions of the organs affected, as well as the broad application of the term, which includes every degree of functional weakness of nerve cells between normal fatigue and complete exhaustion.

Marcus, in 1889, described neurasthenia as "a change in the functional tones of the whole nervous system with increased excitability and tendency to exhaustion," while Benedict, but two years later, expressed the belief that it "was a psychic disease of cortical origin due to emotion and overstrain;" since which there has been a great deal written as to its proper classification, which is still *sub judice*.

To accept the views of some authors would jeopardize the liberty of most of mankind to-day. Therapeutically

it appears of little practical importance whether we have to deal with a functional psychosis or a neurosis, so long as we recognize mental derangement as disordered brain action. Erroneous ideas relative to diseases of the nervous system have arisen from the misconception of mind and its relation to the brain. More than a quarter of a century ago, Ferrier wrote, "that the brain is the organ of mind, and that mental operations are possible only in and through the brain, is now so thoroughly well established and recognized that we may without further question start from this ultimate fact," a theorem certainly fully confirmed, notwithstanding mind is often considered in the abstract. Psychology too often displaces anatomy, physiology, histology and pathology in the study of deranged mentality. In our plea for a more favorable prognosis in fully developed neurasthenia we do not wish to detract from the importance of an early diagnosis and treatment; on the contrary, we would emphasize it, since it is much easier and requires a much shorter time to restore a single deranged organ than it is to restore an organism in which all the interdependent organs are perverted. This subject is especially important to the family physician, to whom the opportunity is often presented in the course of an ordinary professional examination to detect an incipient neurasthenia even before it is suspected by the afflicted or his family, and if he be true to his obligation, long suffering can be averted.

Dr. J. M. Allen, Liberty:—This condition is recognized in two general forms: First, as an autoinfection;

and, second, in its true form, the result of malnutrition of the brain. I believe this all resolves itself into a question of nutrition. Why is it that one-fifth of the blood in the human body is sent to the brain if it is not for the purpose of nutrition? When the nutrition is deficient, of course the condition of the brain cell is deficient. Now, what circumstances will bring about a contraction of the blood vessels continually by which this faulty nutrition is brought about? I venture the assertion that every case is the result of reflex irritation contracting the blood vessels of the brain, finally resulting in a decrease in cell structure, the protoplasm, etc. I believe a large percentage can be cured, and, if neglected, will pass into insanity. I could mention in proof, case after case. If the gentlemen will get down to straightforward,

common sense physiology of nutrition, and recognize the extensive effects of reflex irritation, they will comprehend these cases without any trouble. Seventy-five per cent. of these cases are the result of gastrointestinal irritation, and in particular of irritation in the duodenum, as a basis for the reflex irritation.

Dr. Punton, in closing: My object in writing this paper was to emphasize the close relation neurasthenia sustains to insanity. My judgment is that 95 per cent. of these cases could be cured if recognized in their incipency, but we temporize until they become incurable. That it is a psychosis from the start, and not a neurosis, is the burden of my paper, hence, underlying every case of neurasthenia and hysteria is a morbid heredity and psychology which must be recognized in their treatment.

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—JOURNAL—

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## EDITORIAL.

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### THE STATE BOARD OF HEALTH.

The State Board of Health is greatly handicapped in its efforts to get full reciprocal relations with states foremost in professional requirements, from the fact that under our state law undergraduates are admitted to its examinations on equal footing with medical graduates. As long as the undergraduate is under the law in the exercise of this privilege, and makes a grade of 75 per cent. on general average, the State Board will be obedient to the law's provision. Individually speaking, however, I conceive the law to be lame in this reach of its grace; hurtful alike to the best interest of the student and the public weal. For years the best element of our profession have realized that two terms of six to eight months each, was inadequate time to develop and qualify a doctor of medicine. Under this conviction, and backed by strong pro-

fessional favor, a few medical colleges undertook, some years ago, to meet the advanced requirements by a graded course and a longer term of study. This movement gave impetus to a vigorous and determined fight in the interest of higher medical education throughout the country, and finally succeeded in forcing the adoption of a normally graded course of study and extending the matriculate term to four years in all medical schools. But the victory of this professional vantage is partially nullified by a present legislative enactment which allows the undergraduate the chance, or the privilege of a chance, to abridge these conditions by taking the State Board examination.

Yet, says one: "If a Junior takes the State Board examination and makes a passing grade, isn't that an earnest of his preparation and qualification to practice his profession?"



No. Such a contention does not even intelligently discern the true merits of the situation. In the first place, State Board examinations are not supposed to be too rigid or technical, some consideration is due students upon diploma evidence of having passed a previous medical college examination, and its further witness of a four years' course of study. Moreover, state examining boards are not intended to over-ride and invalidate medical school diplomas where they are tokens of merit. It is the board's function, rather, to challenge the credential value of these and prove them by an examination, elementary and practical in character, but sufficiently strict to test an average intelligence and qualification in the "tokens" they express. Yet, in the ordeal of this challenge many fail, and some fail repeatedly, proving some diploma credentials utterly worthless, and evidently issued by low grade colleges; and, in too many instances, with a laxity that covers the grossest ignorance. Many Juniors from the better grade of schools will, I know, more readily pass a State Board examination than these titular graduates from low grade schools. But this is not the question. Neither is it prejudice to deny the one and admit the other to examination, but simple justice to both. The titular graduate has completed the matriculate term, but climbed too slowly to reach the goal of its progress and fails of the mark of the prize of his high calling in the challenge of test. But the Junior, though running well in the race, has no right to leave its middle course and seek a "privilege" his valent might usurp, but which is best

awarded when he shall have engaged its full period of service. It is the purpose of medical education to make the most and best it can out of a licentiate by a prescribed course of study at the time to develop him. And the heirs of larger promise are the objects of its special care for the honor of professional attainment and the fuller ministry of good to human need.

And the state should not be a party to the injustice of releasing these from the course of study until they have gathered its major benefits. The state might as well give the minor sanction to demand his patrimonial estate and squander it in wanton profligacy before his majority.

Again, other Juniors not in the aforesaid class in point of mental endowment, but still of a somewhat bright, active mind and good memory, who have, perhaps, more often studied up for the special occasion under the very reprehensible quiz compend or "cramming process," take the examination. And, occasionally, out of this number, one of good student parts will make the grade. His "papers," however, show mechanical work, a memory struggle and lack the comprehensive understanding evinced by the more virile minds among the better class of graduates from the better schools.

The Junior, in either instance, gets his state certificate if he makes the grade. But with it he is still an undergraduate and his attainments are, as yet, too embryonic to fit him to engage in his life's arduous ministry, and he should wisely go on and finish his school curriculum. If he leaves college, goes home, buys a

horse and pair of saddle-bags, hangs out a sign and enters upon the practice of his profession, the chances are he will block his path of progress and lack completeness throughout his life. There are exceptions to the rule, I know, but the handicap is a serious one. No matter how well he may succeed, he will always feel and know his life would have had a larger circle of honor and preferment if he had only waited upon the maturer plans of his college course. The student's matriculate years form the period of best study and preparation for his life's work. Opportunities are his in the lecture room, in the clinics, and in the class associations that will not wait upon him when he leaves his Alma Mater. Discipline of mind in habits of study, incentive for research, observation and experience in the technique of work are the golden assets wrought out of consecutive courses of study.

Stay in training until the mind can assay and harmonize, in a measure, some of the fundamental principles conjoined in theory and practice; wait until you are able to prove the truth of your knowledge, in part at least, by deduction and differential analysis, is the advice I would give to young men or young women in the study of medicine to-day.

Some few, one now and then, may curtail expenses and term of study by taking the State Board examination, but they will also curtail education and dwarf the fruits of their life's later struggle. ROBT. H. GOODIER.

#### PROSECUTION OF ILLEGAL PRACTITIONERS.

Cass County Medical Society has been active in the work of prosecuting

illegal practitioners within its borders. One illegal practitioner has been convicted and sentenced. Another is awaiting trial. This good work has resulted from the co-operation of all the members of the society following upon the adoption of resolutions, a copy of which is published below. This is another evidence of what can be done by united effort.

"Whereas, the physicians of the Cass County Medical Society have positive knowledge of the fact that there are persons practicing medicine in our county in direct violation of the medical laws of our state; and,

"Whereas, it is known by the medical profession that such persons are totally ignorant of the fundamental principles of our science and have in no way complied with our state laws regulating the practice of medicine in Missouri; and,

"Whereas, we believe it our duty as medical men, in seeking to uphold the honor and dignity of our profession as well as to safeguard and protect the interests of uninformed, innocent citizens of our county and state from the impositions of these uneducated imposters, to at once take such steps as are necessary to lead to the prosecution and conviction of all parties who persist in the work of practicing medicine without the necessary qualifications as specified by our medical laws enacted by the general assembly of our state. Therefore, be it

"Resolved, first, that we, the members of the Cass County Medical Society, will at once take active steps to furnish our committee on public health and legislation with all the evidence attainable which may be used in the prosecution of such offenders of our law;



"Resolved, second, that part of such evidence shall consist of the names and addresses of all persons who have received medical treatment from the hands of parties who pose as physicians and who are not legally qualified to practice medicine, accompanied by an affidavit, when obtainable, from the party treated, setting forth as clearly as possible, the facts in reference to such treatment rendered, the amount of fees paid for such treatment, and all other information which will aid the committee on public health and legislation in the prosecution of such violators of our law;

"Resolved further, that when this committee has sufficient evidence furnished them by members of the regular profession of our county, and also by other persons who may be interested in enforcing our medical laws, that it shall be the duty of our committee on public health and legislation to furnish this evidence to our prosecuting attorney, and to take all other necessary steps required to have him proceed to the prosecution and conviction of such parties."

These resolutions were endorsed and signed by thirty-seven physicians in Cass County.

#### THE POWER AND INFLUENCE OF THE PROPRIETARY AS- SOCIATION OF AMERICA.

During the last two or three weeks the newspapers of the country have been publishing from paragraphs to columns of matter denouncing the "unjust attacks on a legitimate (?) business," and abusing *Collier's Weekly* for publishing "sensational articles which are calculated to mis-

lead the public." We have never known before what a noble, self-sacrificing business that of the nostrum manufacturer is, nor have we realized how necessary to human life these nostrums are. Sophistry, half-truths and plausible arguments are so intermixed that, to the ordinary individual, it would seem that the nostrum business is not only legitimate and honorable, but absolutely necessary for the welfare of the race. Except in rare instances this matter has not appeared in the metropolitan and leading dailies, for evident reasons, but the smaller newspapers and those that are less independent seem to be the ones that are compelled to defend the "Great American Fraud." The country newspapers which use the "patent insides" are relieved of any responsibility, for the "defense" is in that part of the paper which they buy already printed.

While these articles have appeared in the public press in all parts of the country practically simultaneously, there is such a sameness about the style, the arguments used are similar, and in general character so uniform, that one at once concludes that they must have a common origin. This conclusion would be reached even if there were no other evidence; but the letter we reproduced last week in a comment on "A Newspaper Free from Nostrum Ads.," written by the chairman of the press committee of the Proprietary Association, clearly proves the source. By the way, the "Communication" which was sent to the newspapers with the letter referred to, was the one from Mr. Bok which appeared in the *Journal of the American Medical Association*, in which



he urged physicians to take up the fight against patent medicines. The object of the press committee of the American Proprietary Association evidently was to convey the idea that physicians are instigating the propaganda against "patent" medicine, and the dear people are being told that this is a fact, and that the doctors oppose "patent" medicines for selfish reasons. Incidentally, the medical profession, the American Medical Association, and the *Journal of the American Medical Association* are sadly abused.

What is this organization that has such a power over the newspapers of the country that it can compel them to speak or to be silent? Does this power lie in its numerical strength, in its wealth, or in the social influence of its members? To enlighten our readers, and, indirectly, the public, we print in this issue a complete list of the members of this Proprietary Association of America, taken from their own transactions recently issued.

A glance at this list will give you an idea of the enormous wealth represented, so enormous that it is no exaggeration to say that it is one of the most powerful organizations in the country, from a financial point of view, and that it is not hard to believe that its members pay to the press of the country at least forty million dollars annually, as stated by one of them. Those who are interested in the nostrum question—whether as it relates to the so-called "patent" medicines advertised directly to the public or to those which are exploited to

physicians—will find it worth while to give this list a careful study. In the first place, it will be found that there are few firms in the list which are engaged in an honorable and commendable business. There may be a dozen of these, all told.

Further, it may be noted that scattered through the list are names that are familiar to readers of the advertising pages of medical journals—another evidence of the inseparableness of "patients" and "proprietarys." Another very important fact would be evident if we had space to give the personnel of the firms; a large number of those who under one company are "patent medicine men" under another are, in a very dignified way, exploiting "proprietary" medicines to physicians.

These various firms have banded together, for what? To protect the interests of what Samuel Hopkins Adams calls "The Great American Fraud," to protect the interests of a business that is both infamous and despicable; a business in which few men will, without blushing, acknowledge that they are engaged; a business that thrives on misrepresentation and fraud, that fattens on the gullibility and credulity of the ignorant and that prospers by deceiving the sick and afflicted.

This language may seem harsh. We acknowledge that it is. But is it too harsh when all the facts are known regarding the business and the methods of at least a large majority of the firms which are listed as members of the Proprietary Association of America.—*Journal A. M. A.*

### THE ANNUAL PROGRAM.

At the Excelsior Springs meeting, the secretary introduced a motion which provided that the chairman of the committee on scientific work extend an invitation to all affiliated county societies to furnish a list of their members who are to contribute to the program at the Jefferson City meeting, May, 1906.

In accordance with the instructions of the judicial council an invitation has been sent to every medical society in affiliation. The committee on scientific work will probably have a meeting January 2d, by which time it is hoped the titles of all papers to be presented will have been submitted, as upon the number of contributions will depend in some measure the number of sections into which the work will be divided. However, there will be at least two sections, a medical and a surgical.

Titles of papers must be sent to the secretary of the local society, who will transmit them to the chairman of the committee on scientific work.

### CLASSES OF MEMBERS.

Elsewhere in this issue will be found a roster of members of the Missouri State Medical Association. Many new names have been added since July, and altogether there are eighty-nine societies now in affiliation. In an effort to insure accuracy, a list of members of each county was forwarded to the secretary that such changes as were necessary should be made. The names and addresses in every instance should be correct.

Some difference of opinion exists in several societies as to the classes of members. The question is defi-

nately settled by the constitution of the State Association, chapter IX, section 1: "The secretary of each county society shall forward its assessment, together with its roster, of ALL officers and members. This leaves no room for argument; there can be but one class of members."

### MONTHLY REPORTS.

Hereafter the State Medical Association must report each month any change in the personnel of the medical profession of Missouri to the American Medical Association. That the report may be made, the A. M. A. has supplied the State Association with cards to be sent to the secretary of each local society. These cards are to be filled out in the event of any change in the local society whether it be the addition of a new member, removal to other location or death, and immediately forwarded to the secretary of the State Association. These cards are to form the basis of the monthly report to be made to the American Medical Association.

### DUES FOR 1906.

It is to be hoped the affiliated societies will make an effort to collect the annual dues for 1906 as soon after the first of the year as possible, so that the report of the local societies may be made without the usual delay. We now have nearly 2,000 members and if a concerted action on the part of the officers of county societies is made, probably 500 additional names could be added. There are many physicians in almost every county of the state who would gladly join the local society, thereby becoming members of the State Association and

eligible to membership in the American Medical Association if they were invited. Dues are the same whether members join during the early or latter part of the year.

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#### THE RETIREMENT OF DR. BIDDLE.

The announcement is made in the last number of the *Journal of the Michigan State Medical Society* of the resignation of Dr. A. P. Biddle, secretary of that society, and editor of the journal. Dr. Biddle resigns owing to increased demands of work along other lines. The Michigan State Medical Society has accepted the resignation, to take effect January 1st, and voices its regret at Dr. Biddle's resignation, as well as its appreciation for his faithful and energetic services. This sentiment will be echoed by all officers and members of the American Medical Association who have come in contact with Dr. Biddle during the years of his secretaryship. He has always performed the arduous duties of his position cheerfully, promptly and effectively during the time that he has occupied the secretary's office. He has seen the state medical society grow to its present proportions and the *Journal of the Michigan State Medical Society* developed into one of the best state journals in the country. It is to be hoped that Dr. Biddle's retirement from the secretaryship will not mean that he will cease to take an interest in medical organization or to work as earnestly as heretofore, for the good of his state association and of the American Medical Association.  
—*Journal A. M. A.*

#### THE GREAT AMERICAN FRAUD, LIQUOZONE.

SAMUEL HOPKINS ADAMS.

Twenty years ago the microbe was making a great stir in the land. The public mind, ever prone to exaggerate the importance and extent of any new scientific discovery, ascribed all known diseases to microbes. The infinitesimal creature with the mysterious and unpleasant attributes became the leading topic of the time. Shrewdly appreciating this golden opportunity, a quack genius named Radam invented a drug to slay the new enemy of mankind, and gave it his name. "Radam's Microbe Killer" filled the public prints with blazonry of its lethal virtues. As it consisted of a mixture of muriatic and sulphuric acids with red wine, any microbe which took it was likely to fare hard; but the ingenious Mr. Radam's method of administering it to its intended prey, via the human stomach, failed to commend itself to science, though enormously successful in a financial sense through flamboyant advertising.

In time, some precocious bacillus, having eluded the "killer," carried off its inventor. His nostrum soon vanished. Today it is little heard of, but from the ashes of its glories has arisen a mightier successor, "Liquozone." Where twenty years ago the microbe reveled in publicity, today we talk of germs and bacteria; consequently Liquozone exploits itself as a germicide and bactericide. It is dispensed with the red wine of the Radam concoction, and relies on a weak solution of sulphuric and sulphurous acids, with an occasional trace of hydrochloric or hydrobromic acid. . . . Yet the Liquozone com-



pany is not a patent medicine concern. We have their own word for it.

"We wish to state at the start that we are not patent medicine men, and their methods will not be employed by us. Liquozone is too important a product for quackery."

The head and center of this non-patent-medicine cure-all is Douglas Smith. Mr. Smith is by profession a promoter. He is credited with a keen vision for profits. Several years ago he ran on a worthy ex-piano dealer, a Canadian by the name of Powley (we shall meet him again, trailing clouds of glory in a splendid metamorphosis), who was selling with some success a mixture known as "Powley's Liquefied Ozone." This was guaranteed to kill any disease germ known to science. Mr. Smith examined into the possibilities of the product, bought out Powley, moved the business to Chicago, and organized it as the Liquid Ozone Company. Liquid air was then much in the public prints. Mr. Smith, with the intuition of genius, and something more than genius' contempt for limitations, proceeded to catch the public eye with this frank assertion: "Liquozone is liquid oxygen—that is all."

The object of the compact was not to make money, but to succor the sick and suffering. They say so themselves in their advertising. For some reason, however, the business did not prosper as its new owner had expected. A wider appeal to the sick and suffering was needed. Claude C. Hopkins, formerly an advertising manager for Dr. Shoop's Restorative (also a cure-all), and perhaps the ablest exponent of his specialty in the country, was brought into the concern,

and a record-breaking campaign was planned. This cost no little money, but the event proved it a good investment. President Smith's next move showed him to be the master of a silver tongue, for he persuaded the members of a very prominent law firm who were acting as the company's attorneys, to take stock in the concern, and two of them to become directors. These gentlemen represent, in Chicago, something more than the high professional standing of their firm; they are prominent socially and forward in civic activities; in short, just the sort of people needed by President Smith to bulwark his dubious enterprise with assured respectability.

In the Equitable scandal there has been plenty of evidence to show that directors often lend their names to enterprises of which they know practically nothing. This seems to have been the case with the lawyers. One point they brought up: was liquozone harmful? Positively not, Douglas Smith assured them. On the contrary, it was the greatest boon to the sick in the world's history, and he produced an impressive bulk of testimonials. This apparently satisfied them; they did not investigate the testimonials, but accepted them at their face value. They did not look into the advertising methods of the company; as nearly as I can find out, they never saw an advertisement of liquozone in the papers until long afterward. They just became stockholders and directors, that is all. They did as hundreds of other upright and well-meaning men had done, in lending themselves to a business of which they knew practically nothing.

While the lawyers continued to

practice law, Messrs. Smith and Hopkins were running the Liquozone Company. An enormous advertising campaign was begun. Pamphlets were issued containing testimonials and claiming the soundest of professional backing. Indeed, this matter of expert testimony, chemical, medical and bacteriologic is a specialty of liquozone. Today, despite its reforms, it is supported by an ingenious system of pseudo-scientific charlatany. In justice to Mr. Hopkins, it is but fair to say that he is not responsible for the basic fraud; that the general scheme was devised, and most of the bogus or distorted medical letters arranged, before his advent. But when I came to investigate the product a few months ago, I found that the principal defense against attacks consisted of scientific statements which would not bear analysis, and medical letters not worth the paper they were written on. In the first place, the liquozone people have letters from chemists asseverating that the compound is chemically scientific. . . .

(Mr. Adams goes on to say that, on investigation, he found that the technical indorsement obtained by this company, when analyzed, failed to bear out the claims of liquozone as a medicine. Inquiries conducted along medical lines revealed the fact that the published indorsements were either misstatements or a garbled version of what really had been written about liquozone. One physician, a hospital interne, who was paid to make bacteriologic tests of the germicidal power of liquozone, stated that it had shown such powers, but that the product was worthless medicinally. The last half of his report

was suppressed; only the first half was printed under the designation of "Report made by the ——— Hospital." Another statement was said to have been published by a Dr. "W. H. Myers in the New York *Journal of Health*. Dr. Myers and that journal, Mr. Adams says, are purely fictitious. Another testimonial purporting to come from a physician was found to have been written by a veterinary surgeon. The Suffolk Hospital and Dispensary in Boston, through its president, Mr. Smith, testified in glowing terms to the remedial value of liquozone, but the hospital medical authorities know nothing of liquozone and never prescribed it. One testimonial was found to be genuine, having been written by a "cancer-cure" specialist, who stated that the letter was "not solicited." Letters addressed by Mr. Adams to various institutions in Chicago elicited the information that it either had never used or that it had been experimented with for external application or that a few private patients had purchased it, but on no recommendation from the physicians. Attempts made personally to peruse the "overwhelming number of medical indorsements" failed, the officials of the company claiming that these indorsements were "in the press" and could not be shown.)

. . . In a pamphlet issued by the company, and since withdrawn, occurs this sprightly sketch:

"Liquozone is the discovery of Professor Pauli, the great German chemist, who worked for twenty years to learn how to liquefy oxygen. When Pauli first mentioned his purpose, men laughed at him. The idea



of liquefying a gas—of circulating liquid oxygen in the blood—seemed impossible. But Pauli was one of those men who set their whole hearts on a problem and followed it out either to success or the grave. So Pauli followed out this problem, though it took twenty years. He clung to it through discouragements which would have led any lesser man to abandon it. He worked on it despite poverty and ridicule," etc.

Alas for romance! The scathing blight of the legal mind descended on this touching story. The lawyer-directors would have none of "Professor Pauli, the great German chemist," and liquozone destroyed him, as it had created him. Not totally destroyed, however, for from those rainbow wrappings, now dissipated, emerges the humble but genuine figure of our old acquaintance, Mr. Powley, the ex-piano man of Toronto. He is the prototype of the Teutonic savant. So much the liquozone people now admit, with the defense that the change of Powley to Pauli was, at most, a harmless flight of fancy, "so long as we were not attempting to use a name famous in medicine or bacteriology in order to add prestige to the product." A plea which commends itself by its ingeniousness at least.

. . . Just as to peruna all ills are catarrh, so to liquozone every disease is a germ disease. Every statement in the new prospectus of cure "has been submitted to competent authorities, and is exactly true and correct," declares the recently issued pamphlet, "Liquozone, the Tonic Germicide," and the pamphlet goes on to ascribe, among other ills, asthma, gout, neu-

ralgia, dyspepsia, goiter, and "most forms of kidney, liver and heart troubles" to germs. I don't know just which of the eminent authorities who have been working for the Liquozone Company fathers this remarkable and epoch-making discovery. It might be Professor Pauli, or perhaps the sulphuric-acid-proof firm of Dickman & Mackenzie. Whoever it is ought to make the definite facts public in the interests of humanity as well as their own. Monuments of discarded pill boxes will celebrate the liquozone savant who has determined that dyspepsia is a germ trouble. The discovery that gout is caused by the bite of a bacillus, and not by uric acid, is almost as important an addition to the sum of human knowledge as the determination of a definite organism that produces the twinges of neuralgia, while the germ of heart disease will be acclaimed with whoops of welcome from the entire medical profession. The old claim is repeated that nothing enters into the production of liquozone but gases, water and a little harmless coloring matter, and that the process requires large apparatus and from eight to fourteen days' time. I have seen the apparatus, consisting of huge wooden vats, and can testify to their impressive size. And I have the assurance of several gentlemen whose word (except in print) I am willing to take, that fourteen days' time is employed in impregnating every output of liquid with the gas. The result, so far as can be determined chemically or medically, is precisely the same as could be achieved in fourteen seconds by mixing the acids with the water.



The product is still sulphurous and sulphuric acid heavily diluted, that is all. . . .

(Mr. Adams further states, that of the chemists and bacteriologists employed by the Liquozone Company, there is not one who will risk his professional reputation on the simple and essential statement that liquozone taken internally kills germs in the human system. Under the direction of Mr. Adams, and in the presence of Dr. Gradwohl, representing the Liquozone Company, a series of guinea-pig tests was made by the Lederle Laboratories. The result was that liquozone was found to have absolutely no curative effect, but did, when given in pure form, lower the resistance of the animals which had been inoculated with anthrax, diphtheria and tuberculosis, so that they died a little earlier than those not treated. Dr. Gradwohl was satisfied of the fairness of the tests and declared that, in his opinion, the tests had proved the total ineffectiveness of liquozone as an internal germicide. Mr. Adams says that these experiments showed further that liquozone may decrease the chances of the patient's recovery with every dose that is swallowed, but certainly would not increase them. Mr. Adams continues as follows):

Since the announcement of this article, and before, *Collier's* has been in receipt of much virtuous indignation from a manufacturer of remedies which, he claims, liquozone copies. Charles Marchand has been the most active enemy of the Douglas Smith product. He has attacked the makers in print, organized a society, and es-

tablished a publication mainly devoted to their destruction, and circulated far and wide injurious literature (most of it true) about their product. Of the relative merits of "hydrozone," "glycozone," (Marchand's products), and "liquozone," I know nothing; but I know that the Liquozone Company has never in its history put forth so shameful an advertisement as the one produced on this page (which appeared in the *JOURNAL* September 23, 1905, p. 936) signed Marchand, and printed in the *New Orleans States*, when the yellow fever scare was at its height.

And hydrozone is an "ethical" remedy; its advertisements are to be found in reputable medical journals.—Excerpts from *Collier's Weekly*, November 18, 1905.—*Journal A.M.A.*

#### OBITUARY.

Dr. Peter J. Kirschner died at his home in St. Joseph on September 22. Dr. Kirschner was one of St. Joseph's leading practitioners, having served as county physician in 1880-81, as coroner from 1882 to 1886, and was again county physician in 1889, serving until 1891. He was elected Mayor of St. Joseph in 1898, filling the highest position in the gift of our citizens with honor. Dr. Kirschner was born near St. Joseph, June 13, 1853, attending the public schools of that city until he reached the age of seventeen, then going to Cincinnati for two years, where he pursued his studies. Returning to St. Joseph he read medicine in the office of Dr. Jacob Geiger. He attended the Louisville University in 1877, and was graduated from Bellevue in 1879.

## COUNTY SOCIETY NOTES.

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### ATCHISON COUNTY MEDICAL SOCIETY.

Dr. W. G. Safford, President.

Dr. Austin McMichael, Secretary.

Atchison County Medical Society held a meeting on October 10th, at which time the society was reorganized and a constitution and by-laws adopted in accordance with the state and national societies. The following officers were elected for the ensuing year: President, W. G. Safford; vice-president, G. W. Lott; secretary, Austin McMichael; treasurer, S. D. Smith; reporter, J. A. Postlewait.

The future of the society seems well assured, and good work is expected from all of the members.

AUSTIN McMICHAEL, Secretary.

### BUTLER COUNTY MEDICAL SOCIETY.

Dr. W. A. Kendall, President.

Dr. J. J. Norwine, Secretary.

Butler County Medical Society convened in the City Hall at Poplar Bluff on November 9th, with a large attendance of the members.

Most of the evening was taken up in the discussion of a report by Dr. Detweiler, on a specimen taken from the throat of a child said to have true diphtheria. Some fifty cases of the disease had occurred in Butler county within the past two months, with one death, although antitoxin was used in only one case. The patients usually recovered in about a week, without constitutional symptoms or sequelæ.

Dr. Norwine reported a case of sporadic yellow fever occurring in the

cool days of September, in Poplar Bluff. The report was freely discussed by the members.

J. J. NORWINE, Secretary.

### CLINTON COUNTY MEDICAL SOCIETY.

Dr. John Sturgis, President.

Dr. E. A. Colley, Secretary.

The Clinton County Medical Society met in Plattsburg November 7th, with a fair attendance. The society was called to order by the president, Dr. Sturgis. Minutes of the last meeting were read and approved.

Dr. John Kay reported an interesting case of confinement in which the patient, a multipara with no previous history of trouble, after labor had begun developed an edematous stenosis of the vagina and cervix, associated with a prolapse of the vagina, which was noticed upon the first examination. The head of the child was greatly extended with an effusion, though the head had not engaged. The application of forceps was made almost impossible, as they could not be made to reach the bony part of the head, owing to the great amount of effusion present. Upon delivery, the body of the child was found to be swollen. This case was discussed by several members, but the condition could not be accounted for.

The following committees were appointed:

Drs. P. M. Steckman and E. A. Colley, to examine the records of the physicians practicing in Clinton county, and report at next meeting.

Drs. John Kay and G. B. Rush, to arrange for the entertainment of the society, December 5th.

Drs. John Sturgis, Robert W. Rea and P. M. Steckman, to arrange program for January 2d, 1906.

The society adjourned to meet in Plattsburg, December 5th.

E. A. COLLEY, Secretary.

### COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.

Dr. John R. Lionberger, Secretary.

The Cooper County Medical Society met in regular monthly session at the W. O. W. rooms, in Boonville, November 7th.

The meeting was called to order by Dr. F. R. Smiley, vice-president. Members present: Drs. F. R. Smiley, R. L. Evans, John R. Lionberger, W. H. Reynolds and J. T. Taylor.

On account of the condition of the roads, due to the recent severe rains, many of the members living in the county were unable to be present, and so informed the secretary.

The minutes of the previous meeting were read and approved. On motion the society then adjourned to the offices of Dr. R. L. Evans, as being a more convenient place on account of the number present.

The regular program was dispensed with in order to discuss the report of the committee on fees. The committee had prepared a tabulated list of "fees," and offered it for discussion and comment. The secretary was ordered to make copies of the list and to distribute them among the members, in order that the society might take some definite action upon

this subject at its next regular meeting.

There being no further business, the society adjourned to meet Tuesday, December 5th.

JOHN R. LIONBERGER, Secretary.

### GASCONADE-MARIES-OSAGE COUNTY MEDICAL SOCIETY.

Dr. J. J. Ferrell, President.

Dr. J. W. Nieweg, Secretary.

The Gasconade-Maries-Osage County Medical Society met in the office of Dr. J. D. Seba, October 26th. The society was called to order by the vice-president, Dr. W. R. Ferrell. Clinics were presented by Drs. I. M. Owens, J. D. Seba and W. R. Ferrell. The minutes of the previous meeting were then read and approved.

Dr. W. S. Allee, of Olean, read a paper entitled "The Treatment of Appendicitis Other Than Surgical." Discussed by Drs. J. D. Seba, J. W. Nieweg, F. DeVilbiss, I. M. Owens, Leslie W. R. Ferrell and J. J. Ferrell.

Dr. J. D. Seba presented an interesting case of spina bifida that he had operated on when the child was but a few hours old.

The society then adjourned for luncheon, given by Dr. Seba. Immediately after reconvening, Dr. J. W. Nieweg read a paper entitled, "Some Remarks on the Insidiousness of Typhoid Fever." Discussion by Drs. Allee, Seba, Owens, Leslie, DeVilbiss and W. R. Ferrell.

Dr. J. D. Seba read a paper entitled, "What Are the Functions of the Thyroid Gland?" This paper was discussed by Dr. Owens.



Dr. J. J. Ferrell read a paper entitled "Bronchial Pneumonia." Those taking part in the discussion on this paper were Drs. DeVilbiss, Allee, Nieweg and J. D. Seba.

The secretary-treasurer made his report, which showed a balance of \$5.37 in the treasury. On motion, the report was adopted.

Drs. Allee and W. R. Ferrell were appointed to act with Dr. Seba as censors on the applications of Drs. F. Aufder Heide, J. W. Burgess, W. E. Seba and J. J. Radamacker. All were recommended and elected to membership.

It was moved and carried that Drs. I. M. Owens and F. DeVilbiss be elected honorary members.

It was moved and carried to hold the next meeting at Belle. The society then adjourned to partake of the banquet prepared by the doctors of Bland. After the banquet the following officers were elected for the ensuing year: President, J. J. Ferrell; vice-president, W. R. Ferrell; secretary-treasurer, J. W. Nieweg; censor, J. W. Burgess.

Dr. J. D. Seba was appointed to read a paper on "Spina Bifida," at the next meeting of the State Medical Association, in May, 1906.

Drs. J. W. Burgess, J. J. Radamacker and F. Aufder Heide were appointed on the committee of public health and legislation.

On motion, the society adjourned to meet at Belle on the fourth Thursday in April, 1906.

J. W. NIEWEG, Secretary.

## HARRISON COUNTY MEDICAL SOCIETY.

Dr. A. H. Vandivert, President.  
Dr. W. H. Wiley, Secretary.

Harrison County Medical Society met at Bethany, November 14th, with the president, Dr. Vandivert, in the chair. The attendance was not as large as had been expected, largely on account of there being considerable sickness in several localities.

It was moved and carried that the regular meetings of the society be held on the third Tuesday in January, April, July and October at Bethany, unless otherwise ordered at subsequent meetings.

Two members were added; namely, Drs. Jas. H. J. Morroway, Ridgeway; and B. M. Sutton, Happy Valley. Dr. Morroway formerly practiced in Iowa. Dr. Wiley was chosen delegate to the state meeting and was also elected reporter for the society. The election of members to represent the society on the program of the State Medical Association was deferred until the next meeting.

Drs. Broyles and Vandivert presented a case of chronic inflammation of the uterus and appendages in a woman sixty-three years of age. The patient was prepared for operation, a trained nurse from Ensworth hospital, St. Joseph, being in attendance, and a combined curettement and ovariectomy was begun. Before the curettement was completed the patient became so weak that the laparotomy had to be postponed. All who attended this clinic admired the work of the trained nurse in the perfect preparation of the patient and the room in which the operation took place. It would seem to be a wise

step for physicians in country districts who do not care to do surgery, to select the most available and best equipped member among them and encourage him by assisting without question or criticism. In this way they would gain for themselves many valuable lessons in surgery which would enable them better to do the emergency work that comes to every country doctor at times. Every physician in the county should be a contributing member of the society, and only sickness in his immediate family should be considered an excuse to remain away from the meetings, for the benefits to be derived from a general participation in the work will prove incalculable by stimulating thought and research in the interim.

W. H. WILEY,

Secretary.

### JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robt. T. Sloan, President.

Dr. Max Goldman, Secretary.

The Jackson County Medical Society met in regular session October 12, 1905, the vice-president, Dr. E. H. Thrailkill, in the chair.

The scientific program consisted of a paper by Dr. Ernest F. Robinson, entitled "Spinal Injuries, with Special Reference to the Mechanical and Surgical Treatment." Only the most important topics under the head of spinal injuries were touched upon, such as concussion of the cord, fracture of the spinous processes and arches, compression of the cord, dislocation of vertebrae with and without fracture, and gunshot wounds of the spine. Some stress was laid on the

prognosis of spinal injuries, the essayist stating that these were always serious, and that the prognosis should be guarded in every case. He outlined the symptoms of the various injuries, and mentioned a number of conditions complicating them, as hyperpyrexia, profuse perspiration, cystitis, priapism, vesical and rectal interferences when pressure on the cord existed, atrophy of muscles, bed sores from pressure, etc.

As regards the treatment of fracture and dislocation of the vertebrae, extension and counter extension and manipulation were recommended; a general anesthetic should be employed, the condition carefully examined, and immediate treatment instituted. In cases of marked deformity, excepting when severe shock is present, operation should be advised. However, operative treatment, both in cases of pressure on the cord from dislocation of vertebrae and in gunshot wounds of the cord, has proved unfavorable as to results; nevertheless, operative interference should be advised whenever there are symptoms of compression after spinal injuries.

The doctor reported several cases of spinal fracture and dislocation in which encouraging results were obtained by manipulation and extension with fixation; also a case of gunshot wound of the cord, in which the bullet was located by means of the Röntgen rays and subsequently removed. The patient is now under observation.

Dr. E. von Quast opened the discussion. In reference to prognosis, he said that one is often able to give an encouraging prognosis, and related a case, in which after more than a year of paralysis from spinal injury,

some improvement followed the relief from pressure after laminectomy. A very important consideration, he said, was the time to operate; while every case was a law unto itself, it seemed to him he would always operate and fix early.

Others taking part in the discussion were Drs. R. McL. Schauffler, A. E. Hertzler, G. O. Coffin, M. M. Edmanson, S. Grover Burnett and C. S. Merriman. Dr. Robinson closed the discussion.

#### MEETING OF OCTOBER 26TH.

The scientific program consisted of a paper by Dr. Carl Sandzen, entitled "The Nauheim Treatment of Heart Diseases," and the presentation of a new instrument, and exhibition of a pathological specimen by Dr. A. H. Cordier.

Dr. Sandzen's paper consisted, in a general way, of a description of the passive and resistance movements, and of the natural and prepared, or artificial, baths originated by Dr. Schott, of Nauheim, in the treatment of cardiac dilatation and valvular lesions. The doctor demonstrated the movements which he described, and emphasized the importance of properly and scientifically following the directions recommended. He called the movements "resistance gymnastics." The baths, he asserted, were of great value, and required the attention of an experienced physician or nurse; if not properly given, they would prove not only of little benefit, but possibly harmful. Plain or carbonated water could be used, and the percentage of the gas, as well as of the salines, could be made to vary with the condition of the patient and the effects de-

sired by the attendant. The temperature of the waters, length of time of the baths, and various formulæ for bath-waters, and formulæ for use at homes, were also considered. Success in the treatment of heart diseases by resistance movements, plus the Nauheim baths, was due to the relief to the laboring heart afforded by the dilatation of the vessels at the periphery, thus lessening peripheral resistance, at the same time increasing the arterial tension and contractile power of the heart; such changes in the circulation were followed by beneficial results.

The paper was thoroughly discussed by Drs. R. O. Cross, Franklin E. Murphy, K. B. Richardson, B. C. Hardin and D. R. Porter. Dr. Sandzen closed the discussion.

Dr. Cordier presented before the society his Murphy button obturator and applicator, a description of which appeared in the *Journal A. M. A.*, Volume XLV., No. 12. The doctor added to the interest in his new instruments by demonstrating upon a section of intestine the ease and simplicity of their practical application. They are undoubtedly of great value, and are ingenious additions to the now almost indispensable Murphy button.

The specimen exhibited by Dr. Cordier was a huge fibromyoma which he had removed on that day; it had been associated with a cystic mastitis of long standing. In this neoplasm could be demonstrated nearly every variety of myoma. From the history of the case one was impressed with the futility of curettage in these cases, and that nothing short of a hysterectomy could offer permanent relief from the condition presented. Drs. Howard



Hill and Herman E. Pearse discussed the cases and Dr. Cordier closed the discussion.

New members received: Calvin Atkins, Independence, Mo.; Walter M. Cross, 1005 Campbell street; James J. Clausen, 2311 Summit street; Chas. B. Irwin, 436 New Ridge Building; E. K. Krimminger, Independence, Mo.; George A. King, 400 Altman Building.

The society adjourned to meet on November 9th.

MAX GOLDMAN, Secretary.

#### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.

Dr. H. Will Elder, Secretary.

The Jefferson County Medical Society met in DeSoto on October 24th, Dr. W. H. Farrar, the president, in the chair. Papers were read by Drs. A. H. Hamel, Frank Long and R. E. Donnell. A general discussion by all members followed the reading of these papers.

H. W. ELDER, Secretary.

#### LAFAYETTE COUNTY MEDICAL SOCIETY.

Dr. P. S. Fulkerson, President.

Dr. C. T. Ryland, Secretary.

Lafayette County Medical Society met in regular session at Odessa on November 14th, with a good attendance of members. Dr. W. C. Goodwin was made chairman in the absence of the president, who was kept away on account of sickness in his family.

The following new members were elected: Drs. J. E. Tucker, Lexington; E. F. Gaines, Bates City; Frank McGinnis, Higginsville.

Drs. W. A. Braecklein, R. C. Carter and W. D. Barclay, were appointed a committee to draw up resolutions on the death of Dr. W. A. Blakely, who died at Higginsville on October 18th.

Dr. Braecklein suggested that the committee on legislation be urged to look after any illegal and unregistered practitioners in the county and to push the prosecution of such persons.

Dr. J. H. George read a splendid paper on "Diphtheria." As usual this subject brought forth a great deal of interesting and helpful discussion from all present.

Election of officers for the ensuing year was next in order and resulted as follows: President, Dr. P. S. Fulkerson, Lexington, re-elected; first vice-president, Dr. W. C. Goodwin, Odessa; second vice-president, Dr. W. A. Braecklein, Higginsville; secretary and treasurer, Dr. C. T. Ryland, Lexington.

The chairman appointed Drs. W. G. Harwood, G. W. Fredenall, Geo. Williams and W. C. Goodwin to prepare papers for the program of the next regular meeting.

Adjourned to meet in Higginsville on the second Tuesday in January, 1906. C. T. RYLAND, Secretary.

#### MARION COUNTY MEDICAL SOCIETY.

Dr. R. H. Goodier, President.

Dr. F. Janet Reid, Secretary.

The regular meeting of Marion County Medical Society was held at Hannibal on November 3d, the president, Dr. R. H. Goodier, in the chair. The attendance was fairly good.

Subject for the evening, "Pelvic

Infections." Dr. E. H. Bounds opened the discussion and was followed by other members.

Dr. W. H. Hays reported a case of a child seven months old who had an attack of infantile diarrhea, followed by intussusception. Operation was advised but declined by the parents. Death supervened but no post mortem was made.

The committee on Scientific Communications reported the subjects, together with the names of those who are to open the discussions for the succeeding seven months as follows:

December, 1905, "Relations of Membranous Croup and Diphtheria," Dr. R. Schmidt; January, 1906, "Diseases of the Gall-Bladder," Dr. T. Chowning; February, "La-Grippe," Dr. Primm; March, "Pneumonia," Dr. Hays; April, "Head-aches," Dr. Reid; May, "Malaria," Dr. Chilton; June, "Syphilis," Dr. Farrell.

The next regular meeting will be held on the first Friday evening in December. H. L. BANKS, Reporter.

#### NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. W. Lamson, President.  
Dr. Horace Bowers, Secretary.

The regular monthly meeting of Newton County Medical Society was called to order by the president on November 14th, twelve members being present. The members are greatly interested in the work of the society and each is doing his best to make it a success. At this meeting there was quite a lengthy discussion on the subject of diphtheria, of which there have been quite a number of cases in the county.

The subject of fees was also brought up for discussion, and from the interchange of opinions among the members it is hoped a standard of fees will be established.

Special efforts are being made to have the next meeting a very interesting one.

HORACE BOWERS, Secretary.

#### PEMISCOT COUNTY MEDICAL SOCIETY.

Dr. J. B. Luten, President.  
Dr. John Johnson, Secretary.

Pemiscot County Medical Society met at Hayti, November 7th, and was called to order by the president, Dr. B. D. Crowe. The minutes of the last meeting were read and approved.

The scientific program consisted of a paper by Dr. B. D. Crowe, entitled "Gonorrheal Arthritis." The paper was freely discussed by all members present.

The following officers were elected for the year 1906: President, J. B. Luten; vice-president, A. R. Conrad; secretary and treasurer, John Johnson; reporter, B. D. Crowe; delegate, M. D. Hendrix.

The scientific program for the next meeting will be as follows: Dr. H. F. Mays, "Diphtheria and Scarlet Fever;" Dr. C. E. Martin, "Anesthesia;" Dr. G. W. Phipps, "Duties of the Members of the Society to Society." J. B. LUTEN, Secretary.

#### PLATTE COUNTY MEDICAL SOCIETY.

Dr. R. P. Davis, President.  
Dr. G. C. Coffey, Secretary.

The regular monthly meeting of Platte County Medical Society was

held in Platte City, November 1st, the following physicians being present: Drs. H. H. Patterson, J. A. Baldwin, A. C. Barr, Alva Naylor, Spence Redman, R. P. Davis, R. P. C. Wilson and G. C. Coffey.

Dr. A. C. Barr, of Linkville, read a paper upon "Diagnosis." He said we should recognize symptoms and conditions and give remedies to suit them, rather than giving remedies for our diagnosis. A hurried diagnosis with regard to the symptoms is wrong and very detrimental to the patient. This paper brought forth a liberal discussion from several members present.

Dr. Spence Redman read a paper entitled "The Treatment of Appendicitis; When Surgical, When Medical." This paper dealt very fairly with the subject, and brought out the opinion of every one present in the discussion which followed.

Dr. R. P. Davis, of Woodruff, was selected to prepare a paper for the next meeting of the State Society at Jefferson City in May, 1906.

Applications for membership were received from Dr. Alva Naylor, of Platte City, and Dr. Virgil Morrison, of Iatan.

A general business meeting and discussion was then held. The committee on public health and legislation was given the names of several illegal practitioners who were practicing in the county, and instructed to bring action against them.

The secretary was instructed to mail to every member of the society a copy of the "Principles of Medical Ethics" of the American Medical Association.

Adjourned to meet in Platte City the first Wednesday in December.

G. C. COFFEY, Reporter.

## PULASKI COUNTY MEDICAL SOCIETY.

Dr. W. L. Ragan, President.

Dr. G. W. Orrick, Secretary.

The Pulaski County Medical Society met in regular session Monday, November 6th, at Waynesville. The meeting was well attended and an excellent program was rendered.

The society adjourned to meet at Dixon the first Monday in February.

G. W. ORRICK, Secretary.

## WORTH COUNTY MEDICAL SOCIETY.

Dr. O. H. P. Mills, President.

Dr. J. K. Phipps, Secretary.

The regular monthly meeting of Worth County Medical Society was held at Grant City, November 8th, the president, Dr. Mills, in the chair. Minutes of the last meeting were read and approved.

Dr. John Andrews presented a paper on "Pulmonary Hemorrhage," which was discussed by all the members.

The president reported a case of leukemia in a girl aged nineteen, which terminated fatally in twenty-four days. The case was considered as belonging to the mixed type of this affection, the lymphatics, spleen and bone marrow all being involved in the pathologic process. The microscopic findings, as exhibited by Dr. H. P. Mills were very interesting. There was a true leucocytosis, with one leucocyte to about five erythrocytes, instead of one to five hundred or six hundred as in normal blood. Hemoglobin was reduced to below 40 per cent. before death. Dr. Mills thought this case argued in favor of the



theory of the infectious origin of leukemia. There was a chill, fever, profound toxemia and a faithful picture of an acute infectious disease.

The next meeting will be held the second Wednesday in December.

J. K. PHIPPS, Secretary.

### WAYNE COUNTY MEDICAL SOCIETY.

Dr. J. P. Sebastian, President.

Dr. R. J. Owens, Secretary.

The Wayne County Medical Society met at Piedmont on November 10th, the president, Dr. J. P. Sebastian, in the chair. Minutes of the last meeting were read and approved.

Dr. Hale, of Greenville, read a

paper on "Puerperal Eclampsia" and reported a case. The paper was discussed by a number of the members.

Pneumonia was the subject for general discussion and remarks were made by Drs. Sebastian and Bates. Dr. Bates said he aborted the disease with large mustard draughts applied to the chest. There was some discussion in regard to uniformity of a fee bill. The practice of midwifery without license was also brought up for discussion, but no definite action taken.

The meeting adjourned to meet at Greenville on the second Friday in December.

R. J. OWENS, Secretary.

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## NEWS ITEMS.

The Chillicothe Post Graduate Medical Society is now a good working body. Nearly all the active members of the profession in Chillicothe are members of this society and the good effects of such an organization are apparent to all who have joined the movement.

An interesting session was held on November 16th. Dr. J. F. Cherrington spoke on the subject of appendicitis, and all the members present took part in the discussion.

The Grand River Medical Society will meet in Chillicothe on December 7th. This is one of the oldest medical societies in North Missouri. It is composed of members living in the counties of Livingston, Linn, Caldwell and Daviess. Meetings are held yearly and are always well attended. Dr. Goins of Breckenridge is secretary.

The annual meeting of Livingston County Medical Society will be held on the second Wednesday in January, 1906. At present the meetings are held quarterly, but in January an effort will be made to arrange for monthly meetings.

Dr. H. D. Quigg, Blackwater, Mo., has been very sick, suffering from an attack of typhoid fever. At last report the doctor was rapidly convalescing and well on the road to recovery. Dr. Quigg represents Cooper county in the State Legislature, and was instrumental in securing the passage of the "tuberculosis sanitarium law."

Dr. John R. Lionberger, of Boonville, has been appointed local surgeon for the Missouri Pacific railroad at Boonville, succeeding Dr. R. H. Holman, resigned.

The Atlanta School of Medicine, Atlanta, Ga., opened on October 3d, in its temporary quarters in the Masons' Annuity building with the following faculty: Dr. Howard J. Williams, Dr. William S. Kendrick, Dr. Charles D. Hurt, Dr. George H. Noble, Dr. James M. Crawford, Dr. Edward C. Davis, Dr. Luther C. Fiseer, Dr. Edward G. Jones, proctor of the faculty; Dr. Frank K. Boland, Dr. Hansell Crenshaw, Dr. Stewart R. Roberts, Dr. James L. Campbell, Dr. William L. Champion, Dr. Robert B. Ridley, Jr., Dr. L. Benjamin Clarke and Dr. James H. Crawford.

D. Appleton & Co., of New York, have issued a catalogue of medical books published by them. It contains sixty-four pages, with illustrations from the various books mentioned, the titles of the books, prices and specimen pages. The catalogue will be sent free to any physician making request.

Estimates based upon reports made by students who have entered the physical training department of Missouri University, indicate that in this state at least one person in eight has typhoid fever before he is twenty years of age. Even among the football men, who represent the healthiest type, five of forty-four report an attack of the disease. No other malignant disease is so common.

Dr. C. W. Hetherington, physical director, says this is an unusual condition as compared with other states. The most startling thing about these figures is, that they indicate something radically wrong in sanitary conditions. Dr. A. W. McAlester,

dean of the medical department, says that in a large majority of the cases, properly investigated, typhoid fever has been traced to a polluted water supply.

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I am pleased to announce that final arrangements have been perfected for the tour of the American party to the International Medical Congress at Lisbon, April, 1906.

The party will sail on Saturday, April 7, on the North German Lloyd steamer *Koenig Albert*, for Gibraltar, visiting Algeciras, Seville, Cordova, etc.; spend a week in Lisbon during the congress, and returning to New York on Wednesday, May 9. The trip may be made comfortably in a first-class steamer both ways, all expenses paid, including board and lodging while in Lisbon, and entertainment at other points, for \$300.

A number of side trips are being added, and ticket will be good returning through Europe, if desired, at a slightly increased cost.

Following is a list of those who have joined the party:

Lewis S. McMurtry, M. D., Louisville.

Nicholas Senn, M. D., Chicago.

J. D. Griffith, M. D., Kansas City, Mo.

W. F. Southard, M. D., San Francisco.

Frank P. Norbury, M. D., Jacksonville, Ill.

W. T. Corlett, M. D., Cleveland, Ohio.

C. H. Hughes, M. D., St. Louis, Mo.

R. T. Morris, M. D., New York City.

A. Vander Veer, M. D., Albany, N. Y.

Jos. M. Mathews, M. D., Louisville.

J. B. Murphy, M. D., Chicago.

Fenton B. Turek, M. D., Chicago.

Jas. E. Moore, M. D., Minneapolis, Minn.

Ramon Guiteras, New York City.

Dr. John H. Musser, Philadelphia, is chairman of the national American committee, and Dr. Ramon Guiteras (75 West Fifty-fifth street, New York City) is the secretary, to whom all applications for membership and communications in regard to the presentation of papers should be addressed.

All those who contemplate the trip are cordially urged to make reservation at once in order to secure desirable berth on the steamer and good hotel accommodations. Program of the itinerary upon request. Address

DR. CHAS. WOOD FASSETT,  
St. Joseph, Mo.

Dr. George M. Gould, 1722 Walnut street, Philadelphia, will be grateful for any trustworthy in-

formation as to the methods which have been devised by the blind in overcoming their disability or in gaining a livelihood. Accounts of such lives, anecdotes, references to literature, etc., will be appreciated.

The next regular meeting of the Cass County Medical Society will be held at Harrisonville, December 7, 1905, at 1:30 P. M. The program is as follows:

Paper, "Chloroform in Labor," by Dr. T. W. Adair. Paper, "The Physician as a Business Man," by Dr. W. F. Chaffin. Paper, "The Diagnosis of Typhoid Fever," by F. W. Foster. Paper, by Dr. R. P. Walker. Address, by the retiring president, Dr. R. D. Ramey. Quiz, "Fractures and Dislocations of Radius and Ulna," by Dr. A. R. Elder. Election of officers for ensuing year.

This is our annual meeting. Let every member so arrange his work that he may help to make a record-breaking attendance. Remember the date. DR. J. S. TRIPLETT, Secretary.

## ABSTRACTS.

**Curability of Tabes.**—The writer points out the contradictory opinions which exist with regard to the curability of tabes. Some authorities, such as Babinski and Lerredde, maintain that it is curable by intense mercurial treatment; while others, including Fournier and most of the neurologists, hold a contrary opinion. The writer attempts to reconcile these views as follows: 1. The variety in tabetics is

such that often they cannot be compared, and hence give different results with the same treatment. Also observations made on analogous cases treated by different mercurial methods give different results, and even also with the same mercurial treatment. 2. The toleration of mercury varies with the condition of the patient, earlier stages of the disease and younger patients supporting it best. 3. Mer-



cury gives different results according to the dose and method of administration. Inunction is uncertain; injection of insoluble salts is also uncertain and may lead to accidents; soluble salts are the best for injection, as they are more under control. 4. The result varies from cure to aggravation of symptoms, according to the care exercised in treatment and according as the case is more or less favorable. Mercurial treatment well carried out may arrest the disease or lessen its severity sufficiently for the patient to go about his business. But work should be reduced and the periods of treatment and repose should be annual and prolonged. Mercurial treatment badly carried out may aggravate the disease, or even cause new symptoms which persist afterward. By careful proportion of the dose to the patient's strength the maximum useful effect may be obtained without fatigue or malaise. 5. Some cases get worse under the most careful treatment, and probably syphilis does not play an equal part in all cases. Certain lesions are cicatricial, and are not affected by mercury, while others in the inflammatory stage will react to the drug. The improvement under mercury does not usually prevent the persistence of certain signs, such as modified reflexes; nor further relapses under the influence of overwork, other infections, etc. 6. Mercury is not the only treatment for tabes; the general hygiene is also important, and work should be restricted.

The author concludes that mercury does not cure in all cases of tabes, but under certain conditions gives favorable results. The contradictory accounts given by different observers

are due to the complexity of the cases and to the different methods of treatment. It is an error to give massive doses of mercury to all cases alike, and equally an error not to give it at all. All tabetics should receive mercurial treatment combined with rest, hydrotherapeutics, and re-education of the muscles. The course of tabes is not progressive in all cases, and the author is of the opinion that the classical type described by Duchenne is less common now than formerly. This is probably due to a more general adoption of mercurial treatment.—*Monthly Cyclopedia of Pract. Med.*

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**Ear Complications of Cerebro-Spinal Meningitis.**—Colles (*Medical Record*, September 9, 1905), states that the earlier writers on the subject of cerebro-spinal meningitis, whose observations were made mostly during epidemics in different countries, did not have much to say that was definite or trustworthy concerning any ear complications coming to their notice. The subject was usually dismissed with the remark that the patient became very deaf, or slightly deaf, or that when convalescence set in there was complete deafness present, etc.

A consideration of the aural affection itself and the seat of the lesion showed that opinions varied. It would appear, according to the views of some authorities, that in certain cases an inflammatory lesion at the acoustic center in the brain, or occurring along the course of the nerves of hearing to the auditory foramina through pressure of plastic exudation, might be responsible for the loss of hearing. As evidence, however, that the origin of this affection is not central, Gruen-

ing obtained by electrization the normal reaction of the auditory nerves within the cranium. If the lesion which causes the deafness lies along the course of the auditory nerve within the cranium, the function of the other cranial nerve should be destroyed also. If the inflammation did not involve the labyrinth, but simply damaged the main branches of the auditory nerves, it would be difficult to understand how the trunks of the facials could escape, so intimately related as they are to the former nerves. It is much more probable (and indeed is now generally accepted) that an inflammatory condition of the labyrinth is the causative factor, especially in those cases of profound and lasting deafness. This opinion is borne out by actual post-mortem findings. Klebs states that the mucous lining of the vestibule was detached, the lining membrane of the semi-circular canals was distinctly thickened and loosed, and in the anterior canal there were semifluid purulent masses. Weber-Liel (in 1879) showed that a free communication exists between the endolymphatic and perilymphatic spaces of the labyrinth and the extralabyrinthine intracranial spaces. It is very probable that infection spreads by this route from the meninges to the labyrinth. The inflammatory process extends along the lymph channels of the vestibule and cochlear aqueducts, involving the structures within the bony labyrinth. The composition of the perilymph and endolymph undergoes a change, due to the presence of the specific germ, the blood vessels become dilated and true tissue-hypertrophy takes place from the migration of white blood cells into the sur-

rounding tissues. Owing to these changes in the blood supply, extravasation of blood takes place easily and is often found. The tissues become dense, bone-thickening takes place and often the semicircular canals or cochlea are partially, if not completely, obliterated. In other cases the tissues become necrotic, and we find the labyrinthine structure filled with purulent matter. In some rare instances it has been found that the tympanic cavity has become involved by the purulent process of the internal ear breaking through the oval or round windows. In this manner a purulent otitis media may be established. As far as we know, this form of labyrinthine disease does not differ from that occurring during the course of other epidemic affections, such as scarlet or typhoid fevers, measles, etc.

Another aural affection frequently observed in cases of cerebro-spinal fever is acute inflammation of the middle ear. A mild otitis media is of common occurrence, but usually subsides without any impairment of the hearing power. In some cases a more severe attack of otitis media becomes a suppuration of the middle ear. Moos reported a case of cerebro-spinal meningitis in which, decided, if not total, deafness was found two days before death. At the autopsy it was seen that the tympanic mucous membrane on both sides was decidedly hyperemic and swollen. The auditory nerve in the porus acusticus internus was quite free from evidences of inflammation on both sides, and both labyrinths were normal in every respect. Klebs also has reported a similar case, where the deafness be-



gan shortly after the commencement of the illness, becoming complete in a few days. At the post-mortem examination the auditory nerves (examined microscopically) were found perfectly normal, and the terminal apparatus of the cochlea also. Extensive inflammatory changes, however, were found in the middle ear, the cavity being filled with bands of connective tissue traversing it in all directions, greatly impeding the free movement of the ossicles to which they were firmly adherent.

But this affection, while severe in some instances, cannot satisfactorily account for the profound and complete deafness in by far the greater number of cases, nor for the important fact that deafness is almost invariably bilateral. It may not be total when first observed, only partial; but it will usually be found to increase gradually, becoming complete after some days or weeks.

Most of the unfortunates whose hearing is affected become perfectly deaf, and never regain this function. Otalgia, otorrhea and other local symptoms are, for the most part, entirely absent, excepting, perhaps, vertigo and tinnitus. The loss of hearing does not occur at the same period of the disease in all cases. Some patients emerge from the stupor of the disease with good hearing, but lose it during convalescence; but the majority are observed to be deaf as soon as full consciousness returns.

It is difficult to understand how any attack of acute otitis media could cause such profound and complete deafness, and practically all otologists today are united in the opinion that the labyrinth is the seat of the trouble.

The outlook for recovery of the hearing power is a grave one. In some milder cases a certain amount of hearing may remain. In early life, even after the child has learned to speak a few words, the loss of auditory perception renders the patient mute as well as deaf, such words as the child has learned being soon forgotten. Treatment is unsatisfactory, though it is claimed by some that favorable results have been obtained through reduction of the labyrinthine pressure by the use of pilocarpine. The general prognosis is a gloomy one, and any improvement in the hearing, however slight, should be considered most encouraging.

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**Retroperitoneal Teratoma.**—Nicholson (*St. Louis Medical Review*, October 21, 1905). This case of teratoma of the abdominal cavity is remarkable, not only because of its rare occurrence, rapid growth, and total absence of symptoms until three weeks before death, but because within its substance there was found a chorion epithelioma.

On August 5, 1905, I was consulted by C. W., a healthy-looking, well-developed young man, twenty-one years of age, who complained of one symptom—fainting, which had occurred twice during the preceding week. He had attended to his business until August 4th, when he quit work, fearing an accident during his trips as superintendent down into the mine. Upon inspection, the abdomen appeared normal; pressure over the region of the gall-bladder enabled the examining finger to outline a pear-shaped body. In the median line beneath the rectus abdominis, extending



from a point four inches above the pubes to the lower margin of the right lobe of the liver was an immovable mass of definite form. The line of dullness was continuous between the pear-shaped body and the mass in the median line. Although the growth measured four inches in width, no intestinal disturbance had resulted. Three weeks later the patient vomited and complained of great pain after eating. The vomiting became more frequent and the pain more severe with each succeeding day. I saw the patient on September 3d, and on the following morning made an exploratory incision, revealing a growth extending from the right kidney to the last dorsal vertebra, thence downward to within two inches of the pubes. It was firmly attached to the median line posteriorly, and the kidney externally. The posterior peritoneum was cut through and the mass found to be enclosed in a fibrous capsule, which was sewed to the anterior layer of the peritoneum and a portion of the growth removed. The patient sat up at the end of the first week, but continued to complain of great pain. He died two weeks after the operation.

Post-mortem examination was made by my assistant, Dr. S. S. Stahl, whose report, in part, is as follows: "On opening the cavity of the abdomen and cutting through the posterior peritoneum and transversalis fascia, a fibrous capsule enclosing a semi-solid mass and adherent only in the median line and to the right kidney,

was found. Not without much difficulty could the tumor be removed, so intimately was it attached to the structure, anterior to the vertebral column. The abdominal aorta from the first dorsal vertebra to the fourth lumbar was closely attached to the growth. The gall-bladder was distended, evidently due to pressure on the common duct. Neither the lumbar glands nor the kidneys were enlarged, although the right kidney was adherent to the tumor. The liver, though very slightly enlarged, showed evidence of involvement. The heart and pericardium were normal. The lungs contained two or three hundred nodules."

The tumor weighed a little less than two pounds. It was right-angled and lobulated, the lobules being smooth and extending in different directions. On cutting, the tumor was soft, the anterior inferior extremity being partially cystic. Some of the cysts were as large as a hazel nut. The remainder of the growth appeared solid. The outer surface of the tumor was covered with a distinct fibrous capsule. Paraffin section of the Zinker fixed tissue showed a very complicated mass. Portions of organs were found corresponding in embryonic origin to all the germinal layers. Skin, cutaneous organs, central nervous system, peripheral nerves, represented the epiblast. Mucous glands, tubes cysts, with epithelial lining, were indicative of the hypoblast. Bone, cartilage, fibrous tissue, constituted the mesoblastic structure.

## BOOK REVIEWS.

Biographic Clinics, Volume 3, Essays concerning the Influence of Visual Function, Pathologic and Physiologic upon the Health of Patients. By George M. Gould, M. D., editor of American Medicine, author of "An Illustrated Dictionary of Medicine, Biology," etc. P. Blakiston's Sons & Co. \$1.00.

The author demonstrates the fact that many of the ills of life are due to defective eyesight. That in an examination of 7,166 school children in New York, a total of over 33 per cent. had defects interfering with the pursuit of their studies. In 1,500 consecutive cases analyzed by him 19.3 per cent. had noteworthy morbid digestional effect, 58 per cent. had headaches and 81 per cent. some morbid reflex result. Statistics show that the relation of crime to truancy indicates that some of both may be due to bad eyes. A competent oculist finds the majority of young criminals of the Elmwood Reformatory afflicted with a high degree ametropia, 50 per cent. of chronic epileptics have unsymmetrical astigmatism and anisometropia. Much stress is laid on eye strain as a cause of headache and other nervous diseases and how these conditions may be corrected by the wearing of properly fitted glasses.

Another vital problem discussed is that of scoliosis in school children of which 25 per cent. in Europe are so affected and of which the optic and ocular factors are the prime factors in its etiology.

This volume is well written and the subject a practical one discussed in

the author's masterly scientific manner. It may be read with profit by both the laity and profession.

Transactions of the Thirty-Eighth Annual Session of the West Virginian State Medical Association contains the following articles: Tuberculosis, The Great White Plague, Dr. G. D. Lind; The Palliative Treatment of Prostatic Hypertrophy, Dr. H. E. Sloan; A Symposium on the Etiology, Pathology, Symptoms and Signs and Treatment of Pneumonia, Drs. S. S. Wade, L. O. Rose, W. W. Tomkins and L. D. Wilson; Appendiceal Abscess, Pathology and Treatment, Dr. S. M. Mason; Diseases of the Kidneys, Dr. M. McNeilan; Rupture of the Bladder, Dr. John R. Cook; Experience with Diphtheritic Antitoxin, Dr. W. H. Sharp.

Transactions of the Maine Medical Association, Vol. 15, Part 2; Fifty-Third Annual Meeting. The following articles are reported: Mechanics of the Pelvic Floor in Relation to Obstetric Injuries and their Repair, by Charles Jewitt, M. D.; Diphtheria and Pharyngitis and their Demands for a Correct Diagnosis, by Benjamin Franklin Makepeace, M. D.; Vesicula Fistula, by H. H. Purinton, M. D.; Post-Mortem Examinations, by H. E. Milliken, M. D.; Urano-Staphylorrhaphy, by Owen Smith, M. D.; Tetanus, by Wallace E. Weber, M. D.; Cerebral Arterio-Sclerosis, by Charles B. Witherle; The Necessity for County Sanatoria for the Treatment of Tuberculosis, by E. H. Bennett, M. D.; Treatment of Cold Abscesses, by Hiram Hunt, M. D.

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 Heddens, J. W., 614 Francis St.  
 Hunterson, D. L., Parnell, Mo.  
 Humfreville, D. L., 513 Francis St.  
 Haskins, Fred, 11th & Pacific Sts.  
 Islaub, J. W., 207 S. 14th St.  
 Kenney, W. L., 6th & Felix Sts.  
 Kessler, S. F., 202 N. 5th St.  
 Leonard, P. I., 613 Francis St.  
 Leonard, J. W., Rock Island Bldg.  
 Lee, Herbert, 612 Edmond St.  
 Leichtman, I., 310 S. 9th St.  
 Morton, Daniel, King Hill Bldg.  
 McGill, W. J., King Hill Bldg.

McGlothlan, A. B., 6th & Felix Sts.  
 Morrison, W. S., Rushville, Mo.  
 Owens, F. C., Agency, Mo.  
 Owens, J. F., Ballinger Bldg.  
 Paul, T. M., 825 Fred Ave.  
 Potter, Geo., 7th & Edmond Sts.  
 Potter, T. E., 7th & Edmond Sts.  
 Patterson, F. A., Hughes Bldg.  
 Pitts, Barton, Pitts Bldg.  
 Renaud, E. C., King Hill Bldg.  
 Reynolds, J. B., 417 Francis St.  
 Riemer, M. E., 6014 King Hill Ave.  
 Riley, J. B., Commercial Bldg.  
 Sampson, J. H., 115 N. 5th St.  
 Schmid, W. F., Pitts Bldg.  
 Spencer, F. H., Moss Bldg.  
 Smith, B. H., State Hospital No. 2.  
 Smith, J. C., State Hospital No. 2.  
 Todd, L. A., Logan Block.  
 Thomas, C. E., Commercial Bldg.  
 Thompson, G. R., Hospital No. 2.  
 Toothaker, B. W., Hughes Bldg.  
 Walker, H. L., 926 N. 3rd St.  
 Woodson, C. R., Hospital No. 2.  
 Wallace, C. H., Logan Block.  
 Willman, R., 1505 Fred Ave.

## BUTLER COUNTY.

A. W. KENDALL, President.

J. J. NORWINE, Secretary.

### MEMBERS.

Cadwell, Victor, Poplar Bluff.  
 Dewitt, Eskew, Poplar Bluff.  
 Highfill, W. E., Neeleyville.  
 Kendall, A. W., Poplar Bluff.  
 Mott, J. W., Poplar Bluff.  
 Norwine, J. J., Poplar Bluff.

Seybold, Ira W., Poplar Bluff.  
 Taylor, W. F., Poplar Bluff.  
 Windsor, A., Poplar Bluff.  
 Williamson, C. W., Poplar Bluff.  
 Wright, C. O., Poplar Bluff.

## CALDWELL COUNTY.

C. C. LEEPER, President.

TINSLEY BROWN, Secretary.

### MEMBERS.

Brown, Tinsley, Hamilton.  
 Cowley, G. B., Cowgill.  
 Cramer, J. F., Cowgill.  
 Carr, B. F., Polo.  
 Cannon, J. W. M., Kidder.  
 Crawford, John R., Nettleton.  
 Dowell, G. S., Braymer.  
 Dodge, R. K., Polo.  
 Dwight, K. M., Hamilton.  
 De Lamater, Hashhook, Kidder.  
 Dewey, C. O., Breckenridge.  
 Eads, L. J., Hamilton.

Goins, Geo. W., Breckenridge.  
 Lindley, W. T., Hamilton.  
 Leeper, C. C., Braymer.  
 Mount, R. L., Polo.  
 McMurtrey, A. T., Kidder.  
 Shouse, Wm. S., Kingston.  
 Schroeder, A. H., Braymer.  
 Tiffin, Clayton, Hamilton.  
 Waterman, J. A., Breckenridge.  
 Woldridge, H. L., Breckenridge.  
 Wilkerson, J. O., Cowgill.  
 Woolsey, C. B., Braymer.

## CALLAWAY COUNTY.

J. F. HARRISON, President.

MARTIN YATES, Secretary.

### MEMBERS.

Baker, N. F., Fulton.  
 Bayliss, W. M., Columbia.  
 Berry, J. W., Reform.  
 Bridges, A. D., New Haven.  
 Brunner, E. E., Carrollton.  
 Christian, C. H., New Bloomfield.  
 Crews, R. N., Williamsburg.  
 Davis, J. R., Mokane.  
 Gibbs, R. T., Hatton.  
 Gilman, D. C., Portland.

Harrison, J. F., Fulton.  
 McCall, G. D., Fulton.  
 Martin, Z. T., Albuquerque, N. Mex.  
 Owen, H. I., Fulton.  
 Roots, G. F., Tebbitts.  
 Wilfley, O. S., Millersburg.  
 Williams, P. E., Fulton.  
 Young, D. H., Fulton.  
 Yates, Martin, Fulton.

**CAMDEN COUNTY.**

GEO. M. MOORE, President.

G. T. MYERS, Secretary.

**MEMBERS.**

Byler, W. F., Linn Creek.  
 Claiborn, Ed. G., Decaturville.  
 Clark, W. J., Linn Creek.  
 Ford, J. S., Linn Creek.  
 Hicks, E. S., Macks Creek.

Moore, Geo. M., Linn Creek.  
 Mills, S., Macks Creek  
 Moulder, Geo. A., Linn Creek.  
 Myers, G. T., Macks Creek.

**CAPE GIRARDEAU COUNTY.**

H. L. CUNNINGHAM, President.

J. D. PORTERFIELD, JR., Secretary.

**MEMBERS.**

Brooks, J. Frank, Cape Girardeau.  
 Cunningham, H. L., Cape Girardeau.  
 Dalton, R. P., Cape Girardeau.  
 Futrell, H. B., Oak Ridge.  
 Hart, A. E., Dutchtown.  
 Henderson, R. T., Jackson.  
 Higdon, E. E., Allenville.  
 Howard, W. N., Cape Girardeau.  
 Patton, W. C., Cape Girardeau.

Porterfield, J. D., Jr., Cape Girardeau.  
 Rosenthal, M., Cape Girardeau.  
 Shultz, G. B., Cape Girardeau.  
 Statler, W. K., Oak Ridge.  
 Tarlton, G. W., Cape Girardeau.  
 Wichterich, R. F., Cape Girardeau.  
 Wilson, E. H. G., St. Louis.  
 Woods, S. E., Jackson.

**CARROLL COUNTY.**

W. C. BAIRD, President.

R. F. COOK, Secretary.

**MEMBERS.**

Baird, W. C., Bogard.  
 Boggs, J. D., Rhoads.  
 Cook, R. F., Carrollton.  
 Hollister, W. L., Wakenda.

Highsmith, G. R., Carrollton.  
 Kemp, W. P., Hale.  
 Lee, B. J., Norborne.  
 Miller, S. W., Norborne.

**CARTER—SHANNON COUNTY.**

FRANK HYDE, President.

J. A. CHILTON, Secretary.

**MEMBERS.**

Baltz, T. A., Birchtree.  
 Chilton, J. A., Van Buren.  
 Courtney, J. J., Birchtree.  
 Cotton, T. W., Van Buren.

Gillmor, W. L., Kansas City.  
 Gun, P. D., Birch Tree.  
 Hyde, Frank, Eminence.  
 Ross, L. C., Winona.

**CASS COUNTY.**

RODNEY D. RAMEY, President.

J. S. TRIPLETT, Secretary.

**MEMBERS.**

Adair, T. W., Archie.  
 Barrett, W. H., Harrisonville.  
 Brierly, H. A., Peculiar.  
 Chaffin, W. F., Raymore.  
 Clemmons, W. M., Cleveland.  
 Crawford, H. S., Harrisonville.  
 Dawson, B. E., Belton.  
 Elders, A. R., Harrisonville.  
 Ellis, D. C., Garden City.  
 Ellis, F. B., Garden City.  
 Fair, S. W., Belton.  
 Farnsworth, A. D., Drexel.  
 Farrow, G. W., East Lynne.  
 Foster, F. W., East Lynne.  
 Gilham, E. M., Belton.

Griffith, D. R., Creighton.  
 Jerard, H., Pleasant Hill.  
 Keller, R. G., Freeman.  
 Longacre, C. E., Freeman.  
 Overholser, M. P., Harrisonville.  
 Ramey, R. D., Garden City.  
 Schoor, Albert H., Garden City.  
 Schoor, Edward, Garden City.  
 Scott, J. U., Harrisonville.  
 Smith, Ira, Austin.  
 Triplett, J. S., Harrisonville.  
 Walker, R. P., Belton.  
 Wood, L. M., Pleasant Hill.  
 Wunnicke, A. C., Drexel.

**CHARITON COUNTY.**

HARRY C. TATUM, President.

C. A. JENNINGS, Secretary.

**MEMBERS.**

Austin, M. B., Brunswick.  
 Billeter, W. J., Bynumville.  
 Brummall, J. D., Salisbury.  
 Baker, J. H. P., Salisbury.  
 Baker, W. L., Salisbury.  
 Epperly, R. G., Prairie Hill.  
 Gaines, J. R., Mussell Fork.  
 Hawkins, G. W., Triplett.  
 Hughes, B., Keytesville.  
 Jennings, C. A., Salisbury.

Knott, Isaiah, Keytesville.  
 Kirkpatrick, H. E., Dalton.  
 McAdam, J. D., Prairie Hill.  
 McEwen, Oliver, Shannondale.  
 Pitney, Orville, Forest Green.  
 Temple, C. H., Rockford.  
 Tatum, Harry C., Brunswick.  
 Wallace, J. S., Brunswick.  
 Welch, J. F., Salisbury.  
 Zilman, A. W., Indian Grove.



**CLARK COUNTY.**

L. M. DICKSON, President.

A. C. BRIDGES, Secretary.

**MEMBERS.**

Bridges, A. C., Kahoka.  
 Bridges, J. R., Kahoka.  
 Dickson, L. M., Revere.  
 Harris, H. W., Winchester.  
 Hiller, F. B., Kahoka.

Martin, W. H., Kahoka.  
 McKee, L. D., Wayland.  
 Sisson, W. B., Kahoka.  
 Shanks, C. O., Canton.  
 Teel, A. W., Kahoka.

**CLAY COUNTY.**

L. J. JONES, President.

F. H. MATTHEWS, Secretary.

**MEMBERS.**

Allen, J. M., Liberty.  
 Atton, G. P., Barry.  
 Atkins, Calvin, Independence.  
 Bogart, T. N., Excelsior Springs.  
 Cuthbertson, W. N., Liberty.  
 Cox, H. A., Missouri City.  
 Fulton, F. H., Lathrop.  
 Gaines, J. J., Excelsior Springs.  
 Griffin, J. M., Excelsior Springs.  
 Jones, H. S., Kansas City.  
 Jones, L. J., Linden.  
 Lightfoot, Frank, Excelsior Springs.  
 Lowrey, Ernest, Excelsior Springs.  
 Marsh, J. T., Liberty.

Matthews, F. H., Liberty.  
 Miller, E. H., Liberty.  
 McCullouch, George, Kearney.  
 Ralph, A. B., Missouri City.  
 Rice, J. J., Kearney.  
 Rice, J. T., Excelsior Springs.  
 Rowell, H., Kearney.  
 Rothwell, J. H., Liberty.  
 Sevier, R. E., Liberty.  
 Suddarth, C. H., Smithville.  
 Ward, T. J., Birmingham.  
 Wallace, W. S., Excelsior Springs.  
 Wysong, W. L., Missouri City.  
 Wilson, J. P., Liberty.

**CLINTON COUNTY.**

JOHN STURGIS, President.

E. A. COLLEY, Secretary.

**MEMBERS.**

Colley, E. A., Plattsburg.  
 Kay, John, Perrin.  
 Mitchell, A. R., Mecca.  
 Rea, Robt. W., Plattsburg.  
 Reynolds, S. D., Gower.  
 Rush, G. B., Lathrop.

Starks, J. C., Gower.  
 Sturgis, John, Perrin.  
 Steckman, P. M., Plattsburg.  
 Winn, J. W., Plattsburg.  
 Woods, R. J., Trimble.

**COLE COUNTY.**

J. P. PORTH, President.

G. ETTMUELLER, Secretary.

**MEMBERS.**

Bedford, S. V., Jefferson City.  
 Clark, W. A., Jefferson City.  
 Ettmueller, G., Jefferson City.  
 Enloe, C., Jefferson City.  
 Enloe, I. N., Jefferson City.  
 Hill, J. A., Jefferson City.  
 Hough, C. P., Jefferson City.  
 Leach, L. T., Elston.  
 Lopp, J. E., Jefferson City.

McAlester, A. W., Jefferson City.  
 Moore, O. L., Jefferson City.  
 Martin, J. B., Sr., Russellville.  
 Norwood, W. W., Russellville.  
 Porth, J. P., Jefferson City.  
 Son, E. R., Osage City.  
 Thorpe, J. L., Jefferson City.  
 Yates, S. C., Wardsville.

**COOPER COUNTY.**

P. L. HURT, President.

JOHN R. LIONBERGER, Secretary.

**MEMBERS.**

Allee, E. M., Bunceton.  
 Cochran, O. W., Gooch Mill.  
 Evans, R. L., Boonville.  
 Hurt, P. L., Boonville.  
 Lionberger, J. R., Boonville.  
 Meredith, A. L., Wooldridge.  
 Monroe, A. E., Otterville.  
 Parish, J. S., Pleasant Green.  
 Poindexter, J. W., Prairie Home.  
 Quigg, H. D., Blackwater.

Reynolds, W. H., Lupus.  
 Rice, E. L., Otterville.  
 Russell, G. A., Boonville.  
 Smith, A. J., Boonville.  
 Smiley, F. R., Boonville.  
 Taylor, J. T., Speed.  
 Teel, S. M., Prairie Home.  
 Van Ravenswaay, C. H., Boonville.  
 Wilson, E. A., Blackwater.

**CRAWFORD COUNTY.**

W. A. METCALF, President.

A. H. HORN, Secretary.

**MEMBERS.**

Bamber, W. J., Wilson Mills.  
 Coffee, J. T., Steelville.  
 Cox, Walter S., Cuba.  
 Herzog, G. G., Cuba.

Horn, A. H., Steelville.  
 Metcalf, W. A., Steelville.  
 Metlock, Clarence, Steelville.

**DAVISS COUNTY.**

J. D. DUNHAM, President.

M. A. SMITH, Secretary.

**MEMBERS.**

Brosius, W. L., Gallatin.  
 Clagett, O. F., Jamesport.  
 Depew, F. L., Altamont.  
 Dunham, J. D., Pattonsburg.  
 Doolin, L. R., Gallatin.  
 Eastman, F. C., Winston.  
 Hedges, Frank, Pattonsburg.

Minnick, A. G., Locksprings.  
 Songer, H. E., Jamesport.  
 Smith, M. A., Gallatin.  
 Thompson, O. N., Locksprings.  
 Wetzel, N. M., Jameson.  
 Waller, C. E., Altamont.

**DUNKLIN COUNTY.**

N. F. KELLY, President.

G. L. JOHNSON, Secretary.

**MEMBERS.**

Baldwin, Paul, Kennett.  
 Beall, J. W., Malden.  
 Beall, H. E., Malden.  
 Birchett, J. G., Cardwell.  
 Back, Eli, Cardwell.  
 Bond, V. H., Cotton Plant.  
 Brown, J. L., Campbell.  
 Cone, M. L., Campbell.  
 Chaney, Jason, Senath.  
 Caldwell, J. F., Kennett.  
 Egbert, T. H., Kennett.

Finney, W. B., Kennett.  
 Hughes, W. G., Campbell.  
 Hammersly, G. O., Poplar Bluff.  
 Johnson, G. L., Kennett.  
 Kelly, N. F., Kennett.  
 May, C. A., Campbell.  
 Marshall, E. A., Hornersville.  
 Mobley, A. B., Kennett.  
 Price, W. A., Campbell.  
 Price, H. F., Senath.  
 Rigdon, T. J., Kennett.

**FRANKLIN COUNTY.**

H. A. BOOTH, President.

A. C. BROWN, Secretary.

**MEMBERS.**

Booth, H. A., Pacific.  
 Briegleb, Chas. F., St. Clair.  
 Brown, A. C., Moselle.  
 Dunnigan, J. P., Sullivan.  
 Eimbeck, A. F., New Haven.  
 Eimbeck, Wm. F., New Haven.  
 Hempker, W. H., Catawissa.  
 Kitchell, W. E., St. Clair.  
 Mattox, W. P., Sullivan.  
 May, H. A., Washington.

McNay, A. L., Pacific.  
 North, W. R., Labadie.  
 Owens, I. M., Casco.  
 Poppenhusen, H. A. C., Washington.  
 Rusk, E. McD., Villa Ridge.  
 Rusk, Jno. A., Grays Summit.  
 Snow, Edward A., Union.  
 Stierberger, E. A., Union.  
 Williams, D. E., Lone Dell.  
 Wyllie, B. D. S., Union.

**GASCONADE—MARIES—OSAGE COUNTY.**

JOHN J. FERRELL, President.

J. W. NIEWEG, Secretary.

**MEMBERS.**

Aufder Heide, Frederick, Drake.  
 Burgess, J. W., Belle.  
 Engelbrecht, Jno., Stony Hill.  
 Ferrell, J. J., Owensville.  
 Ferrell, W. R., Bland.

Nieweg, J. W., Lois.  
 Radamacker, J. J., Meta.  
 Seba, J. D., Bland.  
 Seba, W. E., Bland.  
 Spurgon, M. E., Red Bird.

**GREENE COUNTY.**

W. P. PATTERSON, President.

ROBT. M. COWAN, Secretary.

**MEMBERS.**

Barnes, G. W., Springfield.  
 Bartlett, J. R., Springfield.  
 Boyd, Jno. R., Springfield.  
 Camp, W. A., Springfield.

Clements, C. C., Springfield.  
 Coffelt, T. A., Springfield.  
 Cowan, R. M., Springfield.  
 Cox, Lee, Springfield.

Farnsworth, D. B., Springfield.  
 Fulbright, Jno. H., Springfield.  
 Fulbright, J. Harve, Springfield.  
 Fulton, C. E., Springfield.  
 Hill, H. S., Springfield.  
 Hunter, R. B., Springfield.  
 James, W. C., Springfield.  
 Matthews, J. C., Springfield.  
 Nixon, J. H., Springfield.  
 Ormsbee, J. L., Springfield.  
 Patterson, W. P., Springfield.

Peak, O. L., Springfield.  
 Purselley, W. L., Springfield.  
 Ralston, J. P., Springfield.  
 Ross, F. E., Springfield.  
 Sherman, D. U., Elwood.  
 Smith, W. M., Springfield.  
 Tefft, J. E., Springfield.  
 Terry, N. F., Springfield.  
 Williams, J. W., Springfield.  
 Woody, C. E., Springfield.

## GRUNDY COUNTY.

N. E. SUTTON, President.

W. H. WINNINGHAM, Secretary.

### MEMBERS.

Adams, W. R., Laredo.  
 Asher, J. A., Trenton.  
 Allen, E., Hickory.  
 Addington, W. H., Spickards.  
 Cash, R. B., Spickards.  
 Coon, D. W., Trenton.  
 Davenport, R. G., Trenton.  
 Elder, A. L., Trenton.  
 Fulkerson, W. D., Trenton.  
 Hunter, W. R., Trenton.  
 Lowrey, H. L., Tindal.  
 Moore, G. A., Dunlap.

Moore, T. E., Edinburg.  
 Pittman, W. T., Spickards.  
 Sheldon, Samuel, Trenton.  
 Stewart, B. S., Bethany.  
 Stone, J. M., Laredo.  
 Sutton, Noah E., Trenton.  
 Sutton, Bertha E., Trenton.  
 Tracy, Mettie E., Spickards.  
 Travis, K. W., Spickards.  
 Webster, C. L., Trenton.  
 Wright, J. B., Trenton.  
 Winningham, W. H., Edinburg.

## HARRISON COUNTY.

A. H. VANDIVERT, President.

W. H. WILEY, Secretary.

### MEMBERS.

Bryson, E. H., Bethany.  
 Broyls, F. H., Bethany.  
 Chiff, J. K., New Hampton.  
 Eades, M. H., New Hampton.  
 Gwinn, G. E., Bethany.  
 Mitchell, C. A., Blythedale.  
 Morroway, J. H. J., Ridgeway.  
 Robertson, C. H., Eagleville.

Robertson, C. W., Ridgeway.  
 Sellers, C. J., Mt. Moriah.  
 Stewart, B. S., Bethany.  
 Stoughton, E. L., Mt. Moriah.  
 Sutton, B. M., Happy Valley.  
 Vandivert, A. H., Bethany.  
 Wiley, W. H., Ridgeway.  
 Williams, A. W., Ridgeway.

## HENRY COUNTY.

WM. M. SHANKLAND, President.

F. M. DOUGLASS, Secretary.

### MEMBERS.

Benway, Wm. H., Deepwater.  
 Barr, Bernice B., Clinton.  
 Beatty, Joseph G., Clinton, R.F.D. No. 2.  
 Britts, John H., Clinton.  
 Douglass, F. M., Clinton.  
 Fewell, R. B., Montrose.  
 Gibbins, Wm. H., Clinton.  
 Griffith, Charles E., Windsor.  
 Haire, Robt. D., Clinton.

Hampton, Joseph R., Clinton, R.F.D. No. 1.  
 Head, Charles W., Windsor.  
 Menees, G. W., Clinton.  
 Miller, J. M., Montrose.  
 Poaque, Samuel A., Clinton.  
 Russell, John J., Deepwater.  
 Shankland, Wm. M., Clinton.  
 Wallis, J. R., Clinton.  
 Woltzen, S. W., Urich.

## HOLT COUNTY.

C. L. EVANS, President.

J. F. CHANDLER, Secretary.

### MEMBERS.

Aiken, S. W., Oregon.  
 Bullock, F. E., Forest City.  
 Bickel, J. T., Mound City.  
 Chandler, J. F., Forest City.  
 Davis, T. O., Maitland.  
 Davis, J. M., Craig.  
 Evans, C. L., Oregon.  
 Gray, M. S., Craig.

Kelley, P. D., Corning.  
 Kaltenbach, E., Craig.  
 Miller, J. W., Mound City.  
 Miller, E. M., Mound City.  
 Minton, J. R., Fortesque.  
 Quigley, B. T., Mound City.  
 Tracy, J. M., Mound City.  
 Williams, Ira, Maitland.



## HOWARD COUNTY.

A. W. MOORE, President.

C. W. WATTS, Secretary.

## MEMBERS.

Bonham, V. Q., New Franklin.  
 Burkholder, O. F., Higbee.  
 Champion, J. R., Hildale.  
 Cordry, H. V., Boonville.  
 Dinwiddie, T. H., Higbee.  
 Fleet, J. B., New Franklin.  
 Haller, E. C., Harrisburg.  
 Hume, J. Y., Armstrong.  
 Lewis, C. O., Fayette.

Lee, C. H., Fayette.  
 Moore, A. W., Fayette.  
 Smith, N. E., Fayette.  
 Thompson, W. S., Armstrong.  
 Watts, C. W., Fayette.  
 White, J. A., New Franklin.  
 Williams, W. E., Myers.  
 Wood, J. F., Harrisburg.  
 Wright, U. S., Fayette.

## HOWELL COUNTY.

J. W. BINGHAM, President.

H. C. SHUTTEE, Secretary.

## MEMBERS.

Bingham, J. W., Pottersville.  
 Culp, J. C., Koshkonong.  
 Davis, J. C. B., Mountain View.  
 Dixon, J. C. B., West Plains.  
 Johnson, J. McBride, West Plains.  
 Mitchell, E. H., Pottersville.  
 Nichols, D. J., West Plains.

Reiley, J. F., West Plains.  
 Rowe, H. J., Willow Springs.  
 Shuttee, H. C., West Plains.  
 Spears, Robt. S., West Plains.  
 Thompson, A. H., Lanton.  
 Thornburg, A. H., West Plains.

## IRON COUNTY.

R. W. GAY, President.

IRA. A. MARSHALL, Secretary.

## MEMBERS.

Adams, J. Q., Belleview.  
 Adams, J. Q., Goodland.  
 Clarkson, David, Annapolis.

Gay, R. W., Ironton.  
 Marshall, Ira A., Ironton.

## JACKSON COUNTY (KANSAS CITY).

ROBERT T. SLOAN, President.

MAX GOLDMAN, Secretary.

## MEMBERS.

Abrams, W. E., 523 Rialto Bldg.  
 Adams, Noah, 317 Rialto Bldg.  
 Andersson, H. C., 716 Shukert Bldg.  
 Atkins, Calvin, Independence.  
 Armour, Wallace A., 3505 E. 12th St.  
 Ayers, Samuel, 1208 Wyandotte St.  
 Balsley, J. A., 3330 Woodland Ave.  
 Barbee, C. M., 522 Rialto Bldg.  
 Beattie, Thos. J., 603 Commerce Bldg.  
 Beedle, G. A., 314 Altman Bldg.  
 Bell, J. Wallace, 805 McGee St.  
 Bellows, G. E., 429 Rialto Bldg.  
 Berry, G. F., 527 Rialto Bldg.  
 Binnie, J. F., 12th & Wyandotte Sts.  
 Block, J., 502 Commerce Bldg.  
 Bowman, Dora E., 327 Rialto Bldg.  
 Bowman, J. W., 402 Hall Bldg.  
 Brainerd, B. F., Martin City.  
 Brown, Ralph J., 534 Altman Bldg.  
 Bruehl, Julius, 500 New Ridge Bldg.  
 Brunig, F. H., 3137 Main St.  
 Burckhardt, A. E., 2309 Summit St.  
 Burke, C. L., 304 Deardorff Bldg.  
 Eurnett, S. Grover, 425 Rialto Bldg.  
 Burrill, C. W., 623 Shukert Bldg.  
 Callaghan, Richard, 540 Cambridge Ave.  
 Campbell, Wm. L., 15th & Jackson Ave.  
 Carbaugh, Eugene, 430 Rialto Bldg.  
 Carl, S. T., 350 Ridge Bldg.  
 Castelow, R. E., 13 Woodworth Ave.  
 Cathcart, C. P., 419 Deardorff Bldg.  
 Chambers, J. Q., 705 Shukert Bldg.  
 Chambliss, E. L., 523 Rialto Bldg.  
 Child, Scott P., 705 Shukert Bldg.  
 Clements, Jos., Nutley, N. J.

Coffey, W. H., 500 Bellefontaine Ave.  
 Coffin, G. O., 500 New Ridge Bldg.  
 Coleman, H. B., 3032 E. 18th St.  
 Cook, F. L., Blue Springs.  
 Cooper, C. L., 4513 Independence Ave.  
 Cordier, A. H., 310 Rialto Bldg.  
 Cross, R. O., 317 Rialto Bldg.  
 Cross, W. M., 1005 Campbell St.  
 Crowder, W. H., 4647 Independence Ave.  
 Crowell, H. C., 410 Century Bldg.  
 Curdy, R. J., 614 Commerce Bldg.  
 Curry, E. R., 304 Deardorff Bldg.  
 Dailey, F. W., 327 Altman Bldg.  
 Dannaker, C. A., 425 Walrand Ave.  
 Davis, A. W., 3303 Woodland Ave.  
 Davis, G. W., 407 Century Bldg.  
 Dove, O. H., 413 Rialto Bldg.  
 Drake, N. A., 1001 Harrison St.  
 Dunham, S. A., 1302 Garfield Ave.  
 Edmonson, M. M., 2216 Brooklyn Ave.  
 Eldredge, J. S., 1021 Grand Ave.  
 Eubank, A. E., 3021 Southwest Blvd.  
 Farney, H. Mercedes, 2 Wabash Ave.  
 Fields, Thomas, 18th & Prospect Ave.  
 Foster, Hal, 402 Altman Bldg.  
 Frankenberger, J. M., 534 Rialto Bldg.  
 Freyman, A. A., 1201 Independence Ave.  
 Frick, William, 301 Rialto Bldg.  
 Frick, W. J., 311 Commerce Bldg.  
 Fryer, B. E., 520 E. 9th St.  
 Fulton, A. L., 430 Deardorff Bldg.  
 Fulton, C. M., 534 Altman Bldg.  
 Gaines, J. W., 406 Rialto Bldg.  
 Goldman, Max, 309 Century Bldg.  
 Greenlee, A. R., 3016 E. 11th St.

Griffith, J. D., 522 Rialto Bldg.  
 Hall, C. Lester, Bryant Bldg.  
 Hall, D. Walton, Bryant Bldg.  
 Hall, Frank J., 228 Olive St.  
 Halley, George, Ridge Bldg.  
 Hamel, Geo. F., 706 W. 10th St.  
 Hanawalt, H. O., 1214 Main St.  
 Hanna, M. A., 2711 Brooklyn Ave.  
 Hardin, C. B., Rialto Bldg.  
 Harrelson, N. O., Rialto Bldg.  
 Harrington, J. L., 1021 Grand Ave.  
 Harrison, Addison, Lee's Summit.  
 Hashinger, Geo. H., Rialto Bldg.  
 Hays, H. C., 310 Century Bldg.  
 Hedrick, C. L. V., 3108 Cherry St.  
 Henry, Fannie J., 2203 Brooklyn Ave.  
 Hertzler, A. E., 508 Altman Bldg.  
 Hetherington, E. M., Altman Bldg.  
 Hickerson, J. C., Independence.  
 Hill, Howard, Rialto Bldg.  
 Horgan, J. A., 3100 Main St.  
 Hubbard, E. E., Rialto Bldg.  
 Hyde, B. C., 404 Bryant Bldg.  
 Iuen, F. J., 1334 Grand Ave.  
 Jacobs, Ben, Altman Bldg.  
 Jackson, C. A., Rialto Bldg.  
 Jackson, J. N., Rialto Bldg.  
 Jerowitz, H. D., 1233 Grand Ave.  
 Johnson, J. H., Coffeyville, Kan.  
 Jones, O. F., Rialto Bldg.  
 Jones, K. P., 1023 Walnut St.  
 James, S. C., Bryant Bldg.  
 Jenkins, W. H., 1008 Broadway.  
 King, Geo. A., 400 Altman Bldg.  
 King, W. E., 403 Commerce Bldg.  
 Kepner, Jno. W., 720 Shukert Bldg.  
 Kimberlin, Jos. W., 532 Altman Bldg.  
 Knoche, J. P., 912 Walnut St.  
 Kuhn, Wm. F., Farmington.  
 Kyger, J. W., 815 E. 31st St.  
 Lahmer, Ira B., 1336 Broadway.  
 Lane, H. H., 800 Southwest Blvd.  
 Langsdale, J. M., Altman Bldg.  
 Laning, J. H., 623 Shukert Bldg.  
 Lee, R. H., 506 Prospect Ave.  
 Lyle, Halsey M., 532 Altman Bldg.  
 Loyd, O. H., Oak Grove.  
 Lauranzana, Louis, 5th & Cherry Sts.  
 Leonard, H. O., 521 Shukert Bldg.  
 Leonard, W. H., 601 Southwest Blvd.  
 Lester, Chas. H., Bryant Bldg.  
 Lewis, J. K., 1212 Troost Ave.  
 Lewis, Nannie P., 1219 Wyandotte St.  
 Lichtenberg, Jos., 1209 Wyandotte St.  
 Logan, James E., 1229 Wyandotte St.  
 Look, H. H., 428 Altman Bldg.  
 Luscher, Louis W., 12th & Grand Ave.  
 McCall, H. B., 12th & Main Sts.  
 McCandless, O. H., 305 Altman Bldg.  
 McCrea, Maggie, 536 Ridge Bldg.  
 McDonald, Chet., Rialto Bldg.  
 McDonald, Park L., 527 Rialto Bldg.  
 McKee, Jos. W., Rialto Bldg.  
 McQuade, H. D., 435 New Ridge Bldg.  
 McVey, Newton, Rialto Bldg.  
 Manahan, J. H., 534 Ridge Bldg.  
 Mann, A. W., Oak Grove.  
 Mark, E. G., 1208 Wyandotte St.  
 Martin, H. L., 601 E. 12th St.  
 Martin, J. C., 3026 E. 23d St.  
 Merriman, C. S., 2511 Forest Ave.  
 Middleton, James, 412 N. Montgall Ave.  
 Miller, Abram., Rialto Bldg.  
 Miller, Hugh, 1021 Grand Ave.  
 Mitchell, G. B., Rialto Bldg.  
 Mitchell, John T., 510 Ridge Bldg.  
 Montgomery, W. E., Rialto Bldg.  
 Morris, W. C., 315 Garfield Ave.  
 Morrow, C. J., Bryant Bldg.  
 Morrow, W. F., Altman Bldg.  
 Mosher, Geo. C., Bryant Bldg.  
 Mott, Jno. S., Rialto Bldg.  
 Murphy, Franklin E., Deardorff Bldg.  
 Neff, F. C., Altman Bldg.  
 Newhouse, Stanley, 452 Ridge Bldg.  
 Norberg, Geo. P., 526 Altman Bldg.  
 Owens, M. J., 603 Southwest Blvd.  
 O'Connor, C., 815 McGee St.  
 O'Donnell, Alfred, 327 Altman Bldg.  
 Parker, O. H., 12th & Central Sts.  
 Pearce, Herman E., Rialto Bldg.  
 Perkins, John W., Altman Bldg.  
 Pettijohn, N. J., 1310 Tracy Ave.  
 Porter, Allen, Rialto Bldg.  
 Porter, D. R., 10th & Washington Sts.  
 Punton, John, Altman Bldg.  
 Pickerill, C. W., 501 Rialto Bldg.  
 Pinckard, C. G., 8th & Campbell Sts.  
 Rathbone, F. W., Rialto Bldg.  
 Reed, W. M., Rialto Bldg.  
 Reyling, F. T., 1119 Troost Ave.  
 Richardson, Katherine B., Ridge Bldg.  
 Rice, William, 402 Hall Bldg.  
 Ridge, I. M., Ridge Bldg.  
 Riegle, D. H., 14th & Summit Sts.  
 Ritter, C. A., Altman Bldg.  
 Roberts, Clarence F., 720 Shukert Bldg.  
 Roberts, C. S., Lee's Summit.  
 Robertson, J. A., 705 Shukert Bldg.  
 Robinson, Ernest F., Bryant Bldg.  
 Robinson, J. L., Altman Bldg.  
 Rogers, J. C., Rialto Bldg.  
 Rosenwald, Leon, Rialto Bldg.  
 Russell, E. L., 305 Altman Bldg.  
 Sams, W. M., 806 Independence Ave.  
 Sanders, Frank L., 517 Shukert Bldg.  
 Sanders, St. Elmo, Rialto Bldg.  
 Sandzen, Carl, Rialto Bldg.  
 Sawyer, J. F., 5th & Lydia Ave.  
 Schauflier, E. W., Deardorff Bldg.  
 Schauflier, Robt. McE., Deardorff Bldg.  
 Schutz, W. H., Bryant Bldg.  
 Scott, J. N., Ridge Bldg.  
 Sexton, M. P., Century Bldg.  
 Shelley, O. C., Independence.  
 Sherer, Jos. W., 1208 Wyandotte St.  
 Singleton, J. M., 15th & Troost Ave.  
 Sloan, Robt. T., Rialto Bldg.  
 Smith, Avis E., University Bldg.  
 Smith, Robt. M., 203 E. 12th St.  
 Snider, J. S., 403 Commerce Bldg.  
 Spaulding, C. L., Altman Bldg.  
 Stephens, Nannie A., 813 E. 31st St.  
 Stevens, W. W., Greenwood.  
 Stewart, E. L., 521 Shukert Bldg.  
 Streett, St. Clair, 123 W. 12th St.  
 Strother, J. S., 311 Commerce Bldg.  
 Talbot, Ambrose, Rialto Bldg.  
 Taylor, L. G., 720 Woodland Ave.  
 Tesson, N. A. G., 332 Shukert Bldg.  
 Thomas, A. W., Shukert Bldg.  
 Thompson, G. B., 12th & Central Sts.  
 Thompson, James, Rialto Bldg.  
 Thompson, J. H., Deardorff Bldg.  
 Thornton, T. R., Lee's Summit.  
 Thrallkill, E. H., Rialto Bldg.  
 Tiffany, F. E., 805 McGee St.  
 Trimble, W. K., 2742 Holmes St.  
 Tureman, H. G., 702 Commerce Bldg.  
 Twyman, G. T., Independence.  
 Van Eman, F. T., Altman Bldg.  
 Van Quast, Ernst, Century Bldg.  
 Waddell, Susan C., 3027 Montgall Ave.  
 Wall, A. H., 3839 Independence Ave.  
 Watson, B. F., Rialto Bldg.  
 Wedding, E. V., 15th & Brooklyn Ave.  
 Weiss, F. H., 415 Deardorff Bldg.  
 Welch, A. J., 29th & Southwest Blvd.  
 West, W. C., 531 Rialto Bldg.  
 Wever, J. S.  
 Wheeler, B. H., 324 Deardorff Bldg.  
 Wheeler, W. S., 12th & Grand Ave.  
 Willitts, W. C., Rialto Bldg.  
 Wilson, A. M., 906 Main St.  
 Wilson, Dora G., University Bldg.  
 Wilson, John, 720 Shukert Bldg.  
 Wolf, I. J., Rialto Bldg.  
 Wood, N. P., Independence.  
 Young, Oscar O., 5918 Troost Ave.  
 Zwart, B. H., 1019 Prospect Ave.

## JASPER COUNTY.

A. B. FREEMAN, President.

J. T. STAMEY, Secretary.

## MEMBERS.

Balsley, T. M., Joplin.  
 Cummings, C. C., Joplin.  
 Chenoweth, L. C., Webb City.  
 Clark, J. W., Cartersville.  
 Freeman, A. B., Joplin.  
 Granthan, S. A., Joplin.  
 Gray, J. M., Chitwood.  
 James, R. M., Joplin.  
 Kay, Z. L., Joplin.  
 Kelso, R. S., Joplin.  
 Kinchelow, M. B., Joplin.  
 Lewis, W. E., Chitwood.  
 Lanyon, W. H., Joplin.

Matthews, L. I., Joplin.  
 Miller, S. H., Joplin.  
 Miller, Geo. W., Joplin.  
 Neff, R. L., Joplin.  
 Nunn, G. G., Joplin.  
 Pifer, J. D., Joplin.  
 Rogers, W. H., Asbury.  
 Snyder, R. A., Joplin.  
 Shelton, C. M., Joplin.  
 Stamey, J. T., St. Joseph.  
 Spriggs, M. S., Joplin.  
 Watkins, C. H., Joplin.

## JEFFERSON COUNTY.

W. H. FARRAR, President.

H. W. ELDERS, Secretary.

## MEMBERS.

Auerswald, G. A., De Soto.  
 Bryan, C. G., De Soto.  
 Donnell, R. E., De Soto.  
 Donnell, J. F., Festus.  
 Elders, H. Will, De Soto.  
 Elders, G. W. N., Hematite.  
 Elders, Geo. W., Ware.  
 Farrar, W. H., De Soto.  
 Gibson, W. E., De Soto.  
 Hensley, O. E., Pevely.  
 Harris, C. G., Festus.

Hamel, A. H., DeSoto.  
 Hull, W. W., Sulphur Springs.  
 Jones, J. E., Hillsboro.  
 Long, F. S., De Soto.  
 McNutt, I. N., Pevely.  
 Mockbee, G. M., Hillsboro.  
 Neff, J. B., De Soto.  
 Pickel, J. W., Crystal City.  
 Prentiss, H. S., De Soto.  
 Stegman, J. E., Frumet.  
 Tidwell, Geo. W., De Soto.

## JOHNSON COUNTY.

M. P. SHY, President.

E. H. GILBERT, Secretary.

## MEMBERS.

Aber, W. H., Montserrat.  
 Adcock, J. A. B., Warrensburg.  
 Anderson, J. T., Cornelia.  
 Anderson, J. I., Warrensburg.  
 Bozarth, John A., Centerville.  
 Berry, A. J., Warrensburg.  
 Bradley, T. L., Warrensburg.  
 Case, Z., Warrensburg.  
 Calloway, G. L., Warrensburg.  
 Gilbert, E. H., Warrensburg.  
 Hall, O. B., Warrensburg.  
 Johnson, W. E., Warrensburg.

McGinnis, H. F., Hoffman.  
 Murray, L. F., Warrensburg.  
 Ozias, C. O., Warrensburg.  
 Park, Henry, Dunksburg.  
 Porter, W. E., Knobnoster.  
 Rice, J. M., Columbus.  
 Schofield, L. J., Warrensburg.  
 Schooley, R. C., Robins.  
 Shy, M. P., Knobnoster.  
 Thompson, W. G., Holden.  
 Tilton, A. L., Truxton, Ariz.

## KNOX COUNTY.

L. S. BROWN, President.

HENRY J. JURGENS, Secretary.

## MEMBERS.

Arnett, Andrew, Novelty.  
 Brown, Geo. S., Edina.  
 Brown, L. S., Edina.  
 Jurgens, Henry J., Edina.

Luman, F. E., Baring.  
 Myers, James, Greensburg.  
 Northcutt, J. R., Knox City.  
 St. John, Horace H., Edina.

## LACLEDE COUNTY.

J. M. BILLINGS, President.

J. A. McCOMB, Secretary.

## MEMBERS.

Parker, J. C., Russ.  
 Billings, J. M., Lebanon.  
 Carleton, C. E., Stoutland.  
 Jacobs, J., Conway.  
 Lockwood, W. A., Conway.  
 McComb, J., Lebanon.

McComb, J. A., Lebanon.  
 Perkins, J. M., Lebanon.  
 Pinckard, J. A., Lebanon.  
 Pritchett, P. L.  
 Ritchey, Robt., Dry Glaze.



**LAFAYETTE COUNTY.**

P. S. FULKERSON, President.

C. T. RYLAND, Secretary.

**MEMBERS.**

Barclay, W. D., Odessa.  
 Braecklein, W. A., Higginsville.  
 Cope, J. Q., Lexington.  
 Carter, R. C., Higginsville.  
 Fredendall, G. W., Lexington.  
 Fulkerson, P. S., Lexington.  
 Fulkerson, J. J., Lexington.  
 Gaines, E. F., Bates City.  
 George, J. H., Odessa.  
 Hitt, R. E. L., Oklahoma City, O. T.  
 Harwood, W. G., Dover.

McGinnis, Frank, Higginsville.  
 Mann, J. A., Wellington.  
 Mann, F. W., Wellington.  
 Perrie, J., Mayview.  
 Ramsey, C. F., Dover.  
 Ryland, C. T., Lexington.  
 Schneider, J. A., Concordia.  
 Tucker, J. E., Lexington.  
 Webb, W. C., Higginsville.  
 Williams, Geo., Odessa.  
 Williams, H., Odessa.

**LINCOLN COUNTY.**

S. R. McKAY, President.

W. P. SMITH, Secretary.

**MEMBERS.**

Avery, C. D., Troy.  
 Beatty, J. D., Troy.  
 Blackamore, T. A., Olney.  
 Duwelins, L. H., Briscoe.  
 Hicks, E. A., Old Monroe.  
 Mackey, A. C., Ethlyn.

McKay, S. R., Troy.  
 Parker, J. H., Moscow Mills.  
 Pendleton, L., Troy.  
 Smith, W. P., Troy.  
 Strickland, J. R., Moscow Mills.  
 Taylor, A. M., Elsberry.

**LINN COUNTY.**

KATHRYN V. STANDLY, President.

D. F. HOWARD, Secretary.

**MEMBERS.**

Burke, J. L., Laclede.  
 Burke, F. W., Laclede.  
 Buck, U. G., Rothville.  
 Cochran, F. B., Brookfield.  
 Cantwell, J. L., Bucklin.  
 Dryden, U. C., Purdin.  
 Eure, J. B., Brookfield.  
 Evans, J. S., Brookfield.  
 Fore, T. P., Brookfield.  
 Haley, Robt., Brookfield.  
 Howard, D. F., Brookfield.  
 Jenkins, C. E., Brookfield.  
 Lane, J. W., Linneus.

Morris, Robt. H., Linneus.  
 Mason, J. W., Brookfield.  
 Putnam, Ola, Marceline.  
 Putnam, B. B., Marceline.  
 Pettijohn, A. C., Brookfield.  
 Perrin, J. H., Marceline.  
 Owen, T. P., Brookfield.  
 Standly, Kathryn V., Brookfield.  
 Standly, Z. T., Laclede.  
 Standly, E. D., Linneus.  
 Stratton, C. D., Rothville.  
 Thompson, J. M., Meadville.

**LIVINGSTON COUNTY.**

DAVID GORDON, President.

JOHN F. CHERRINGTON, Secretary.

**MEMBERS.**

Alexander, G. W., Chula.  
 Beeman, S. M., Chillicothe.  
 Barney, R., Chillicothe.  
 Batdorff, F. P., Farmersville.  
 Carver, H. N., Chillicothe.  
 Cherrington, J. F., Chillicothe.  
 Chaffin, R. E., Avalon.  
 Cobtall, R. H., Chillicothe.  
 Gordon, Geo. A., Chillicothe.  
 Gibson, H. C., Mooresville.  
 Girdner, W. M., Chillicothe.  
 Grace, H. M., Chillicothe.  
 Gordon, David, Chillicothe.  
 Hutchinson, G. W., Jamesport.

Houf, W., Farmersville.  
 Henderson, W. A., Kansas City.  
 Murray, R. W., Dawn.  
 Ogan, E. F., Chula.  
 Piatt, K. S., Chillicothe.  
 Stevens, B. N., Chillicothe.  
 Simpson, A. J., Chillicothe.  
 Simpson, W. R., Chillicothe.  
 Swope, Wm. A., Wheeling.  
 Tracy, L. E., Chillicothe.  
 Trimble, J. W., Wheeling.  
 White, W. L., Springhill.  
 Winter, J. H., Parkville.

**MACON COUNTY.**

W. H. MILLER, President.

C. W. REAGAN, Secretary.

**MEMBERS.**

Allen, F. W., Callao.  
 Bradley, W. E., Ethel.  
 Brewington, G. F., Bevier.  
 Bunch, B. F., Bloomington.  
 Burton, S. L., College Mound.

Campbell, J. F., La Plata.  
 Drew, F. W., Ethel.  
 Foster, J. P., Lacrosse.  
 Hunt, J. R., Ardmore.  
 Mason, L. O., Bevier.

Milam, B. J., Macon.  
 Miller, A. B., Macon.  
 Miller, G. A., College Mound.  
 Miller, W. H., Macon.  
 Naylor, O., Atlanta.  
 Newton, F. H., Cash.  
 Norris, T. J., Macon.  
 Pipkin, W. D., Excello.  
 Raines, A. M., Tennile.  
 Reagan, C. W., Macon.

Salyer, C. E., Callao.  
 Schwab, B. C., Ardmore.  
 Smith, C. W., Keota.  
 Smith, E. S., Macon.  
 Southern, J. N., Atlanta.  
 Tainter, Paul R., Callao.  
 Thompson, L. M., Macon.  
 Trippier, F. L., College Mound.  
 Webb, W. E., Macon.  
 Welch, W. A., Callao.

## MADISON COUNTY.

G. W. GREENWOOD, President.

C. U. DAVIS, Secretary.

### MEMBERS.

Anthony, C. A., Fredericktown.  
 Banon, Harry, Mine Lamotte.  
 Cozzens, E. P., Fredericktown.  
 Davis, C. U., Fredericktown.  
 Dines, G. L., Mine Lamotte.

Gale, Frank W., Marquand.  
 Greenwood, G. W., Fredericktown.  
 Haley, O., Fredericktown.  
 Renfro, J. H., Fredericktown.  
 Slaughter, S. C., Fredericktown.

## MARION COUNTY.

R. H. GOODIER President.

F. JANET REID, Secretary.

### MEMBERS.

Banks, H. L., Hannibal.  
 Baskett, J. N., Hannibal.  
 Bounds, E. H., Hannibal.  
 Bourn, J. J., Hannibal.  
 Bush, F. W., Hannibal.  
 Chilton, J. C., Hannibal.  
 Chowning, Thos., Hannibal.  
 Farrell, J. J., Hannibal.  
 Goodier, Robt. H., Hannibal.

Hays, W. H., Hannibal.  
 Hornback, E. T., Hannibal.  
 Primm, J. N., Hannibal.  
 Reid, F. Janet, Hannibal.  
 Shanks, A. L., Hannibal.  
 Schmidt, Richard, Hannibal.  
 Vandiver, C. E., Palmyra.  
 Waldo, E. E., Hannibal.

## MCDONALD COUNTY.

E. F. DOTY, President.

M. L. SELLERS, Secretary.

### MEMBERS.

Beeson, H. O., Noel.  
 Best, W. S., Anderson.  
 Chase, A. U., Tiff City.  
 Denman, J. I., Southwest City.  
 Doty, E. T., Anderson.

Horton, W. H., Jane.  
 Sellers, M. L., Anderson.  
 Smith, B. F., Southwest City.  
 St. John, O., Pineville.

## MERCER COUNTY.

H. P. CHESMORE, President.

C. R. BUREN, Secretary.

### MEMBERS.

Bristow, G. M., Princeton.  
 Buren, Chas. R., Princeton.

Chesmore, H. P., Princeton.  
 Nally, H., Cainsville.

## MILLER COUNTY.

S. P. HICKMAN, President.

G. D. WALKER, Secretary.

### MEMBERS.

Allee, W. S., Olean.  
 Bowlin, B. F., Bagnell.  
 Brockman, C. O., Bagnell.  
 Brockman, H. H., Eldon.  
 DeVilbiss, F., Spring Garden.  
 Dickson, W. D., Tuscumbia.  
 Gilleland, J. L., Olean.  
 Hickman, S. P., Ulman.

Kouns, D. H., Tuscumbia.  
 Mace, G. R., Iberia.  
 Nixdorf, A. P., Pleasant Farm.  
 Temple, J. W., Eldon.  
 VonGrimp, W. A., Iberia.  
 Walker, G. D., Eldon.

## MISSISSIPPI COUNTY.

P. P. BOGGAN, President.

W. P. HOWLE, Secretary.

### MEMBERS.

Boggan, P. P., East Prairie.  
 Chapman, A. W., Charleston.  
 Hamner, W. D., Bertrand.  
 Howle, W. P., Charleston.  
 Martin, A. J., East Prairie.

Ogilvie, R. K., Charleston.  
 Rowe, John M., Charleston.  
 Reed, H. L., Charleston.  
 Story, C. A., Diehlstadt.  
 Wallace, G. R., Bertrand.

**MONITEAU COUNTY.**

J. B. STEWART, President.

W. R. PATTERSON, Secretary.

**MEMBERS.**

Bramel, H. W., McGirk.  
 Burke, J. P., California.  
 Crum, J. A., California.  
 Dearing, W. A., Jamestown.  
 Elliott, W. H., Bunceton.  
 Freudenberger, H., Centertown.  
 English, J. E., Bacon.  
 Klueber, H. C., California.  
 Latham, H. W., Latham.

Latham, L. L., Latham.  
 Marsh, J. W., Tipton.  
 Norman, J. B., California.  
 Patterson, W. R., Tipton.  
 Popejoy, H. R., High Point.  
 Robertson, J. M., Latham.  
 Stewart, J. B., Clarksburg.  
 Thorpe, A. V., Jamestown.  
 Wilson, G. S., Fortuna.

**MONROE COUNTY.**

S. M. BROWN, President.

M. C. McMURRY, Secretary.

**MEMBERS.**

Baker, Chas., Santa Fe.  
 Bell, W. T., Stoutsville.  
 Blankenship, W. R., Madison.  
 Bodine, S. M., Paris.  
 Brown, John E., Florida.  
 Brown, S. M., Monroe City.  
 Carver, F. H., Madison.  
 Cassity, G. H., Tulip.  
 Day, C., Paris.  
 Dixon, C. H., Holliday.

Duncan, Edward, Long Branch.  
 Ely, A. E., Monroe City.  
 Johnson, G. A., Holliday.  
 Lloyd, T. B., Paris.  
 McMurry, M. C., Paris.  
 McNutt, W. B. A., Monroe City.  
 Moss, F. M., Paris.  
 Payne, H. C., Paris.  
 Shobe, H. G., Paris.

**MONTGOMERY COUNTY.**

J. L. JONES, President.

W. M. WHEELER, Secretary.

**MEMBERS.**

Bonewitz, John, Jonesburg.  
 Bellamy, J. A., Middletown.  
 Hudson, D. O., Montgomery City.  
 Jones, J. L., Jonesburg.

Muns, G. E., Montgomery City.  
 Nowlin, David, Montgomery City.  
 Wheeler, W. M., High Hill.

**MORGAN COUNTY.**

W. L. HATLER, President.

J. T. BEALE, Secretary.

**MEMBERS.**

Beale, John T., Versailles.  
 Blacksten, H. E., Excelsior.  
 Bohling, Cord, Pyrmont.  
 Hatler, W. L., Barnett.

Hubbard, Joel D., Versailles.  
 Kelley, R. Q., Versailles.  
 Lutmann, H. M., Versailles.  
 Well, Wm., Versailles.

**NEW MADRID COUNTY.**

WELTON O'BANNON, President.

C. W. WATSON, Secretary.

**MEMBERS.**

Atkisson, J. A., Moorhouse.  
 Bell, J. B., Moorehouse.  
 Hallenbeck, T. S., Portageville.  
 Hart, J. W., Moorehouse.

O'Bannon, Welton, New Madrid.  
 Sparhawk, W. J., Marston.  
 Watson, C. W., New Madrid.  
 Williamson, Jno. J., New Madrid.

**NEWTON COUNTY.**

J. L. LAMSON, President.

HORACE BOWERS, Secretary.

**MEMBERS.**

Benton, A. W., Neosho.  
 Powers, H., Neosho.  
 Bridges, J. M., Tipton Ford.  
 Brown, W. D., Newtonia.  
 Campbell, Wm., Seneca.  
 Chapman, U. S., Diamond.  
 Cravens, W. A., Granby.  
 Doty, E. T., Anderson.  
 Foster, H. F., Neosho.  
 Hancock, J. B., Newtonia.  
 Harrison, G. Wm., Newtonia.  
 Hodges, J. J., Granby.

Lamson, J. W., Neosho.  
 Lamson, R. C., Neosho.  
 Langley, J. W., Granby.  
 Maas, A., Neosho.  
 Mixer, H. M., Neosho.  
 Porter, H. L., Seneca.  
 Roseberry, E. M., Neosho.  
 Russell, S. A., Stella.  
 Vancleave, C. T., Neosho.  
 Willis, R. L., Neosho.  
 Yates, Paul C., Neosho.



## NODAWAY COUNTY.

F. R. ANTHONY, President.

L. E. DEAN, Secretary.

## MEMBERS.

Allen, A. B., Maryville.  
 Anthony, F. R., Maryville.  
 Crowson, E. L., Pickering.  
 Cummins, K. C., Maryville.  
 Day, Hiram, Parnell.  
 Dean, J. W., Maryville.  
 Dean, L. E., Maryville.  
 Dowell, H. S., Clearmont.  
 Ellis, C. A., Maryville.  
 Heryford, W. B., Pickering.  
 Howell, C. F., Burlington Junction.  
 Kessler, O. C., Ravenwood.  
 Koch, C. D., Maryville.

Large, S. D., Hopkins.  
 Larrabee, J. A., Barnard.  
 McClanahan, J. M., Guilford.  
 Morrison, J. B., Maryville.  
 Nash, G. A., Maryville.  
 Pierpoint, J. E., Skidmore.  
 Pollard, D. A., Barnard.  
 Stuckle, W. P., Clyde.  
 Todd, J. H., Maryville.  
 Saylor, H. L., Elmo.  
 Wallis, F. C., Maryville.  
 Wallis, W. M., Maryville.  
 Wood, W. S., Elmo.

## PEMISCOT COUNTY.

B. D. CROWE, President.

J. B. LUTEN, Secretary.

## MEMBERS.

Bugg, A. F., Pascola.  
 Byars, H. T., Caruthersville.  
 Conrad, A. R., Caruthersville.  
 Crowe, B. D., Caruthersville.  
 Faris, J. C., Caruthersville.  
 Ferguson, P. P., Steele.  
 Hall, L. B., Caruthersville.  
 Hendrix, M. D., Caruthersville.

Hudgings, M. H., Caruthersville.  
 Johnson, John, Hayti.  
 Luten, J. B., Caruthersville.  
 Martin, Chas. E., Caruthersville.  
 Phipps, G. W., Caruthersville.  
 Swearingen, W. A., Steele.  
 Tipton, Paul, Cooter.

## PERRY COUNTY.

T. M. HUDSON, President.

F. M. VESSELLS, Secretary.

## MEMBERS.

Blaylock, G. A., Silver Lake.  
 Bowman, C. B., Longtown.  
 Clark, J. P., Perryville.  
 Estel, T. F., Altenberg.  
 Garner, K. C., Crosstown.  
 Hatcher, W. H., Perryville.

Hudson, T. M., Perryville.  
 Manning, L. R., Brewer.  
 Morton, D. F., Perryville.  
 Russel, J. W., Longtown.  
 Vessells, F. M., Perryville.

## PETTIS COUNTY (SEDALIA).

W. C. OVERSTREET, President.

W. J. FERGUSON, Secretary.

## MEMBERS.

Albers, E. A., Smithton.  
 Bronson, I. T., Royal Tribe Bldg.  
 Bohling, C., 5th & Ohio.  
 Bishop, B. T., Hughesville.  
 Cole, H. B., 501 So. Engineer.  
 Cole, W. M., 501 So. Engineer.  
 Collins, M. T., 219 Ilgenfritz Bldg.  
 Cowan, W. G., 504 So. Ohio.  
 Cartright, C. P., Sedalia R. F. D. No. 1.  
 Clabough, O. W., Green Ridge.  
 Dyer, David P., Dresden, Mo.  
 Dunlap, W. O., 108 West Main St.  
 Evans, W. H., Beaman.  
 Ferguson, W. J., 321 So. Ohio.  
 Ferguson, L., Green Ridge.  
 Fisher, Amos T., Citizens' Bank Bldg.  
 Harris, B. W., Georgetown.  
 Hite, H. A., Green Ridge.  
 Hubbard, Joel D., 13th & Ohio.  
 Kelly, Sam, Ilgenfritz Bldg.

Knott, Minerva, E. 7th St.  
 Love, J. G., M. K. & T. Hosp.  
 McNeil, G. E., M. K. & T. Hosp.  
 Mitchell, J., Lookout.  
 Morley, Frank R., 1003 E. 5th St.  
 Martin, John G., 700 E. Broadway.  
 Overstreet, W. C., 312 S. Ohio.  
 Prowell, J. D., Longwood.  
 Parkhurst, C. L., Houstonia.  
 Sutton, F. L., Hoffman Bldg.  
 Shirk, W. S., Hoffman Bldg.  
 Sands, M. L., Cole Camp.  
 Simonds, Wallace, Katy Bldg.  
 Trader, J. W., 5th & Ohio.  
 Tyler, R. S., Dunksburg.  
 Titsworth, G., 508 S. Ohio.  
 Tucker, A. J., Ilgenfritz Bldg.  
 Wood, E. A., Hoffman Bldg.  
 Yancey, E. F., M. K. & T. Hosp.

**PHELPS COUNTY.**

B. T. SMITH, President.

S. L. BAYSINGER, Secretary.

**MEMBERS.**

Baysinger, S. L., Rolla.  
 Breuer, W. H., St. James.  
 Cowan, R. B., Edgar Springs.  
 Gowin, O. G., St. James.

Johnson, R. L., Rolla.  
 Rowe, Samuel B., Rolla.  
 Short, Martha J., Rolla.  
 Smith, B. T., Newburg.

**PIKE COUNTY.**

M. O. BIGGS, President.

T. GUY HETHERLIN, Secretary.

**MEMBERS.**

Biggs, M. O., Bowling Green.  
 Brown, D. T., Novinger.  
 Hetherlin, T. Guy, Louisiana.

Kennedy, J. J., Frankford.  
 Shelton, J. C., New Hartford.  
 Tinsley, G. N., Bowling Green.

**PLATTE COUNTY.**

ROBERT P. DAVIS, President.

GRUNDY C. COFFEY, Secretary.

**MEMBERS.**

Barr, A. C., Linkville.  
 Chastain, C. H., Weston.  
 Coffey, E. McD., Platte City.  
 Coffey, G. C., Platte City.  
 Davis, R. P., Woodruff.  
 Dinwiddie, F. G., Camden Point.  
 Hale, J. M., Dearborn.  
 Herndon, A. S., Camden Point.

Moore, M. H., Dearborn.  
 Murray, E. W., Kansas City.  
 Patterson, Henry H., Edgerton.  
 Redman, Spence, Platte City.  
 Smedley, W. H., Weston.  
 Swaney, W. D., Linkville.  
 Wilson, R. P. C., Platte City.

**PULASKI COUNTY.**

W. L. REAGAN, President.

G. W. ORRICK, Secretary.

**MEMBERS.**

Carter, W. C., Dixon.  
 Claiborn, D. R., Waynesville.  
 Harrison, R. T., Dixon.  
 Murphy, H. C., Richland.  
 Oliver, Everett A., Richland.  
 Orrick, G. W., Crocker.

Reagan, W. L., Richland.  
 Rolens, M. F., Dixon.  
 Stebbins, N. I., Crocker.  
 Thume, Geo. W., Richland.  
 Tice, L., Waynesville.

**PUTNAM COUNTY.**

C. H. CARRYER, President.

J. A. TOWNSEND, Secretary.

**MEMBERS.**

Carrier, C. H., Hartford.  
 Cozad, F. A., Powersville.  
 Ellis, A. D., Powersville.  
 Fretwell, W. J., Unionville.  
 Geisinger, E. J., Unionville.  
 Gray, L. L., St. John.  
 Haynes, Lee, Mendota.  
 Holman, J. H., Unionville.

McCutchen, J. E., Lemonville.  
 Montgomery, E. A., Unionville.  
 Noel, Frank, Unionville.  
 Nulton, Ida M., Livonia.  
 Rice, F. D., Lucerne.  
 St. John, R. L., Howland.  
 Townsend, J. A., Unionville.

**RALLS COUNTY.**

W. L. BIRNEY, President.

T. J. DOWNING, Secretary.

**MEMBERS.**

Birney, W. L., Oakwood.  
 Downing, T. J., New London.  
 Downing, S. W., Perry.  
 Graves, C. H., Center.  
 Horwood, W. S., Rensselear.  
 Hendrix, W. G., New London.  
 Miles, A. W., Perry.  
 Moore, F. M., Perry.

Monroe, Thos., Center.  
 McCullom, R. W., Center.  
 Ragen, Sam., New London.  
 Walter, Fred. E., Perry.  
 Waters, Thos. E., New London.  
 Wix, F. M., Center.  
 Winn, Marven, Saverton.

**RANDOLPH COUNTY.**

G. O. CUPPAIDGE, President.

W. M. DICKERSON, Secretary.

**MEMBERS.**

Adams, S. C., Huntsville.  
 Barnhart, D. A., Huntsville.  
 Brown, A. J., Higbee.  
 Clapp, C. B., Moberly.  
 Cuppaidge, G. O., Moberly.  
 Dickerson, W. M., Renick.  
 McCormack, Frank, Darksville.  
 Mangus, T. D., Moberly.

Mangus, C. W., Moberly.  
 Magee, W. K., Moberly.  
 Nichols, G. W., Higbee.  
 Rafter, J. G., Huntsville.  
 Shrader, E. W., Moberly.  
 Toulis, S. P., Jacksonville.  
 Woods, R. A., Clark.

**RAY COUNTY.**

L. D. GREENE, President.

E. P. HIGDON, Secretary.

**MEMBERS.**

Craven, Y. D., Lawson.  
 Cook, T. B., Rayville.  
 Crowley, C. C., Richmond.  
 Gosney, C. W., Kansas City.  
 Greene, L. D., Richmond.  
 Grimes, M., Hardin.  
 Hamilton, R. L., Richmond.

Higdon, E. F., Richmond.  
 McGaugh, E. T., Richmond.  
 Mussen, E. H., Rockingham.  
 Sevier, R., Richmond.  
 Shotwell, C. B., Richmond.  
 Sheets, Robt., Orrick.  
 Smith, James W., Richmond.

**REYNOLDS COUNTY.**

J. M. LOWERY, President.

T. W. CHILTON, Secretary.

**MEMBERS.**

Chilton, T. W., Corridon.  
 Cloonan, M., Ruble.  
 Copeland, W. A., Ellington.  
 Lowery, J. M., Centerville.

McKenzie, D. H., Lesterville.  
 Moffitt, J. H., Redford.  
 Moore, J. H., Centerville.  
 O'Dell, T. T., Ellington.

**RIPLEY COUNTY.**

S. A. PROCTOR, President.

J. F. REDWINE, Secretary.

**MEMBERS.**

Cordrey, H. D., Poynor.  
 Kerr, Wesley B., Doniphan.

Proctor, S. A., Doniphan.  
 Redwine, J. F., Doniphan.

**SALINE COUNTY.**

D. C. GORE, President.

D. F. BELL, Secretary.

**MEMBERS.**

Bell, D. F., Marshall.  
 Chastain, M. T., Marshall.  
 Crank, A. C., Herndon.  
 Gore, D. C., Marshall.  
 Hall, J. R., Marshall.

Harris, J. E., Marshall.  
 Howard, F. A., Slater.  
 Spotts, B. M., Marshall.  
 Shuck, L. I., Nelson.

**SCHUYLER COUNTY.**

E. L. MITCHELL, President.

H. E. GERWIG, Secretary.

**MEMBERS.**

Bridges, J. B., Downing.  
 Gerwig, H. E., Downing.  
 Jones, J. T., Queen City.  
 Justice, W. F., Lancaster.  
 Keller, J. H., Glenwood.

Mitchell, E. L., Lancaster.  
 Mitchell, W. F., Lancaster.  
 Rambo, J. H., Glenwood.  
 Potter, B. B., Lancaster.

**SCOTLAND COUNTY.**

W. E. ALEXANDER, President.

O. F. PILE, Secretary.

**MEMBERS.**

Alexander, W. E., Memphis.  
 Bondurant, W. E. H., Memphis.  
 Davis, A. L., Arbela.  
 Johnson, F. M., Gorin.  
 Mackey, A. H., Gorin.

Maynard, Geo. K., Hitt.  
 Parrish, E. E., Memphis.  
 Parrish, J. E., Memphis.  
 Pile, O. F., Memphis.  
 Platter, A. E., Memphis.



**SHELBY COUNTY.**

H. C. VAUGHAN, President.

A. M. WOOD, Secretary.

**MEMBERS.**

Carson, Wm., Shelbyville.  
 Chapman, Chas., Shelbyna.  
 Dallas, L. W., Hunnewell.  
 Devin, J. F., Shelbyville.  
 Dobson, D. A., Hunnewell.  
 Owen, W. W., Oak Dale.

Pollard, H. M., Shelbyna.  
 Read, N. M., Clarence.  
 Smith, J. D., Shelbyna.  
 Vaughan, H. C., Shelbyna.  
 Wood, A. G., Lentner.  
 Wood, A. M., Lentner.

**STE. GENEVIEVE COUNTY.**

M. ANDRE, President.

F. E. HINCH, Secretary.

**MEMBERS.**

Andre, M., Ste. Genevieve.  
 Counts, H. L., Avon.  
 Hinch, F. E., Ste. Genevieve.  
 Lanning, R. W., Ste. Genevieve.

Meyer, A. G., Ste. Genevieve.  
 Moore, C., St. Marys.  
 Morganstein, H. J., Weingarten.  
 Rutledge, G. M., Ste. Genevieve.

**ST. CHARLES COUNTY.**

J. R. MUDD, President.

B. K. STUMBERG, Secretary.

**MEMBERS.**

Baller, H., Cottleville.  
 Bitter, Carl, St. Charles.  
 Bruere, John, St. Charles.  
 Corley, H. N., St. Paul.  
 Dunn, F. P., St. Peters.  
 Gossow, A., St. Charles.  
 Hardy, Wm. F., St. Charles.

Morgner, O., St. Charles.  
 Mudd, J. R., St. Charles.  
 Muhm, O. A., New Melle.  
 Stumberg, B. K., St. Charles.  
 Tainter, E. J., St. Charles.  
 Wentker, B. P., St. Charles.

**ST. CLAIR COUNTY.**

W. CLINE, President.

E. D. MILES, Secretary.

**MEMBERS.**

Bell, W. E., Osceola.  
 Cline, W., Appleton City.  
 Edmondson, M. T., Iconium.  
 Follin, E. D., Collins.  
 Landaker, C. L., Collins.  
 Miles, E. D., Osceola.  
 Moorehouse, Emma, Appleton City.  
 Pingrey, W. B., Ralston, Okla.

Seevers, John, Osceola.  
 Selvidge, L. B., Collins.  
 Sheldon, T. J., Lowry City.  
 Smith, R. J., Appleton City.  
 Sullivan, E. W., Osceola.  
 Taylor, W. E., Ohio P. O.  
 Williams, D. B., Osceola.  
 Wright, Leo S., Lowry City.

**ST. LOUIS COUNTY.**

H. G. WYER, President.

H. T. RANDLE, Secretary.

**MEMBERS.**

Armstrong, C. L., Webster Grove.  
 Bates, Conway, Clayton.  
 Berry, J. M., Webster Grove.  
 Campbell, A. V., Glendale.  
 Coleman, H. T., Pattonville.  
 Dalton, Martin, Fenton.  
 Denny, R. B., Eureka.  
 Douglass, J. T., Ferguson.  
 Dunnavant, C. A., Kirkwood.  
 Eatherton, J. W., Allenton.  
 Forsythe, Robert C., Kirkwood.  
 Gallagher, J. C., Valley Park.  
 Greensfelder, H. B., Kirkwood.  
 Guibor, F. E., Maplewood.

Ham, W. J., Creve Coeur.  
 Higgins, R. M., Webster Grove.  
 Jensen, N. N., Florissant.  
 Kinner, Wm., Ferguson.  
 Loving, S. R., Pond.  
 Moore, R. D., Central.  
 Pfister, J. D., Fern Ridge.  
 Pitman, John, Kirkwood.  
 Randle, H. T., Clayton.  
 Reynolds, S. H., Maplewood.  
 Thurman, E. J., Fenton.  
 Townsend, W. H., Maplewood.  
 Wyer, H. G., Kirkwood.

## ST. LOUIS CITY.

FRANK L. HENDERSON, President.

T. A. HOPKINS, Secretary.

## MEMBERS.

- Abeken, F. W., 3531 S. Broadway.  
 Albrecht, F. H., 3763 Westminster Pl.  
 Allison, N., Linmar Bldg.  
 Allyn, A. B., 3136 Morganford Road.  
 Alt, A., 3036 Locust St.  
 Althans, Carl, 2848 Accomac St.  
 Ambrose, A. O., 313 N. 9th St.  
 Ameiss, F. C., Vanol Bldg.  
 Amyx, R. F., 1943 N. 11th St.  
 Amerland, J. H., 2739 Chippewa St.  
 Apperson, E. L., 536 N. Taylor Ave.  
 Atkins, H. S., Insane Asylum.  
 Atkinson, R. C., 3002 Lafayette Ave.  
 Aufderheide, W. D., 2754 Arsenal St.  
 Auler, H. A., 2708 Lynch St.  
 Ayars, T. R., 3739 Easton Ave.  
 Babler, E. A., 617 Euclid Ave.  
 Bailey, F. W., City Hospital.  
 Baker, R. W., 1438 Pendleton Ave.  
 Ball, J. M., 3509 Franklin Ave.  
 Ball, O. F., Linmar Bldg.  
 Barck, C., 2715 Locust St.  
 Barclay, R., 3894 Washington Ave.  
 Bardenheier, F. G. A., City Hospital.  
 Barnard, A. L., 2931 Easton Ave.  
 Barnes, A. S., 5434 Maple Ave.  
 Barnes, A. S., Jr., Mo. Trust Bldg.  
 Barnes, R. H., 412 Sarah St.  
 Bartlett, W., 4257 Washington Ave.  
 Bauduy, W. K., 2808 Olive St.  
 Bauer, C. E., 2104 N. 14th St.  
 Baumgarten, G., Humboldt Bldg.  
 Baumgarten, W., Humboldt Bldg.  
 Becker, W. H., 4743 Labadie Ave.  
 Bedal, A. C., 3418 Lucas Ave.  
 Behrens, L. H., 5 S. Broadway.  
 Bishop, F. L., 516 N. Garrison Ave.  
 Black, W. D., 1411 California Ave.  
 Blair, V. P., Linmar Bldg.  
 Bles, V. A., Linmar Bldg.  
 Bliss, M. A., 3561 Olive St.  
 Block, Robt. C., Linmar Bldg.  
 Bock, A. F., 1107 N. Grand Ave.  
 Boisliniere, L. C., 3533 Olive St.  
 Boehm, J. L., 3806 Delmar Ave.  
 Bond, H. W., Linmar Bldg.  
 Bond, Y. H., 315 N. Grand Ave.  
 Boogher, F., High & Carr Sts.  
 Boogher, J. L., Mo. Trust Bldg.  
 Booth, D. S., Linmar Bldg.  
 Borck, Edw., 3916 N. 20th St.  
 Bradley, A. H., 1019 N. 21st St.  
 Brady, J. M., 1467 Union Blvd.  
 Brandenberger, L. A., 2900 Eads Ave.  
 Breed, M. E., 1018 Hamilton Ave.  
 Bremer, L., 3723 W. Pine.  
 Bribach, B., 7608 Michigan Ave.  
 Broderick, J. K., Vanol Bldg.  
 Brokaw, A. V. L., 536 N. Taylor Ave.  
 Brooks, H. S., 3557 Lafayette Ave.  
 Broome, G. W., 612 N. Taylor Ave.  
 Brown, J. Y., City Hospital.  
 Bryan, W. M. C., 3858 Westminster Pl.  
 Buck, T. E., 2610 S. 26th St.  
 Buckwalter, J. C., Century Bldg.  
 Burford, C. E., 932 Hamilton Ave.  
 Burnett, D. C., 2602 N. Taylor Ave.  
 Burnett, E. C., Century Bldg.  
 Burns, R., 4500 Olive St.  
 Cadwallader, I. H., 919 N. Taylor Ave.  
 Campbell, G., 3429 Morgan St.  
 Campbell, O. H., 614 N. Compton Ave.  
 Cape, L. W., Sutton & Hazel.  
 Caplan, L., 4500 Olive St.  
 Carley, H. D., 3419 Bell Ave.  
 Carman, R. D., 4318 Olive St.  
 Carson, N. B., Humboldt Bldg.  
 Carson, G. W., 301 Century Bldg.  
 Chaddock, C. G., 3750 Lindell Bl.  
 Chapman, H. N., 3821 Delmar Ave.  
 Clark, W. J., Maysville, Mo.  
 Clemens, Jas., 3720 Pine St.  
 Clopton, M. B., Humboldt Bldg.  
 Cobb, C. D., Neponsette, Mass.  
 Collasowitz, A., Olivia Bldg.  
 Connolly, P. D., 2556 N. Grand Ave.  
 Cooney, D. C., 4247 Finney Ave.  
 Crandall, G. C., 4287 Olive St.  
 Creveling, H. C., 219 N. Sarah St.  
 Crossen, H. S., 4477 Delmar Ave.  
 Cummings, H. J., 1200 N. Grand Ave.  
 Curl, J. L., 2901 Clifton Ave.  
 Dalton, H. C., 3536 Easton Ave.  
 Davis, L. H., 1017 Park Ave.  
 Davis, W., 5013a Page Ave.  
 Dean, J. M., 319 N. Grand Ave.  
 Deutsch, W. S., 3135 Washington Ave.  
 Dickerson, W. L., 5443 Washington Ave.  
 Dorset, Walter B., Linmar Bldg.  
 Dorsey, B. L., 1422 N. Taylor Ave.  
 Drace, C. C., City Dispensary.  
 Draper, N. M., 3300 Washington Ave.  
 Dudley, C. R., Linmar Bldg.  
 Duncan, J. H., Humboldt Bldg.  
 Eberlein, E. W., 1208 Dillon St.  
 Ehrhardt, R. T., Century Bldg.  
 Ehrenfest, H., Vanol Bldg.  
 Elbrecht, O. H., Female Hospital.  
 Engman, M. F., Humboldt Bldg.  
 Epstein, M. J., 1905 N. 11th St.  
 Ewing, F. C., Century Bldg.  
 Eyermann, E. H., 1800 S. Broadway.  
 Faber, J. E., 2123 S. 26th St.  
 Fahlen, F., 116 N. Grand Ave.  
 Falk, J. C., 2701 Stoddard St.  
 Ferrel, H. E., 822 N. Grand Ave.  
 Fisch, C., 3212 Pine St.  
 Fischel, W. E., Humboldt Bldg.  
 Fischer, W., 3554a Olive St.  
 Fleming, A. W., 4130 Manchester Road.  
 Forster, O. E., Carleton Bldg.  
 Forster, D., 6209 Easton Ave.  
 Fowler, S. R., Carleton Bldg.  
 Fox, S. D., 2846 Manchester.  
 Frankenthal, M., 4163 McPherson Ave.  
 Freudenstein, W. H., 3836 Clark Ave.  
 Freund, N. M., 1440 S. 18th St.  
 Friedman, J., 308 N. 6th St.  
 Frielingsdorf, E. H., 2202 S. Broadway.  
 Fry, F. R., Humboldt Bldg.  
 Fuchs, W. H., 2830 Lafayette Ave.  
 Fuhrmann, R. H., 3221 California Ave.  
 Fulton, A. L., 617 Chouteau Ave.  
 Funkhouser, R. M., 4354 Olive St.  
 Furney, E. E., 3417 Morgan St.  
 Gamble, D. C., 644 Century Bldg.  
 Garstang, D. B., Linmar Bldg.  
 Gayler, W. C., 3904 Laclede Ave.  
 Gehrung, E. C., Linmar Bldg.  
 Geitz, H. A., Humboldt Bldg.  
 Gellhorn, Geo., Linmar Bldg.  
 Glasgow, F. A., 3894 Washington Ave.  
 Glasgow, W. C., 2847 Washington Ave.  
 Goebel, A., 3508 Manchester.  
 Goldstein, M. A., 3858 Westminster Pl.  
 Golland, M., 1712 Carr St.  
 Goodloe, H., Vanol Bldg.  
 Goodwin, E. J., Linmar Bldg.  
 Gradwohl, R. B. H., 5001 Fairmount Ave.  
 Graham, I. E., 1417 Newstead Ave.  
 Graham, T. E., City Hospital.  
 Grant, J. M., 4132 Easton Ave.  
 Graves, S. C., 3603 Lindell Bl.  
 Graves, W. W., Vanol Bldg.

Green, John, Jr., Vanol Bldg.  
 Greer, E. O., 2750 Park Ave.  
 Griffin, P. H., 2730 Washington Ave.  
 Grindon, Joseph, 3894 Washington Ave.  
 Gross, J. H., 306 Oriol Bldg.  
 Grote, W. F. H., 1225 Sullivan Ave.  
 Guhman, J. O., 2608 Olive St.  
 Guhman, M. J., 3505 N. 26th St.  
 Guhman, Chas., N. 43rd & Finney Ave.  
 Haase, M. E., 1105 S. 7th St.  
 Hall, Willis, Humboldt Bldg.  
 Hall, H. R., 925 Goodfellow Ave.  
 Hallam, J. C., Mermod-Jaccard Bldg.  
 Hardaway, W. A., Lister Bldg.  
 Harnisch, H. D., 2407 S. 18th St.  
 Harris, D. L., 926 Academy St.  
 Harris, R. C., 1303 N. Garrison Ave.  
 Hartwig, O. A., 927 Market St.  
 Hawley, N. J., Century Bldg.  
 Hawley, T. S., 3065 Easton Ave.  
 Helwig, H. J., 2804 Manchester Ave.  
 Hempel, Max, 3857 N. Grand Ave.  
 Henckler, E. H., 2237 Chouteau Ave.  
 Henderson, F. L., Humboldt Bldg.  
 Henke, A. F., 2210 Howard St.  
 Hennerich, J. F., 2921 S. Broadway.  
 Herchenroeder, L. C., 2904 Park Ave.  
 Hermann, H. W., 1127 N. Grand Ave.  
 Heuer, Phil H., 303 N. Grand Ave.  
 Heyer, C., 910 N. 10th St.  
 Higbee, E. H., 4952 Park View Pl.  
 Hill, R., 4605 Delmar Ave.  
 Hirsch, W. T., 2217 N. Grand Ave.  
 Hochderfer, D. F., 308 N. 6th St.  
 Hoefler, J. P., 2304 S. Compton Ave.  
 Hoffman, P., 3337 Washington Ave.  
 Hoge, M. W., Linmar Bldg.  
 Holtgrewe, F. W., 1601 Blair Ave.  
 Homan, G., Odd Fellows Bldg.  
 Hopkins, M. J., 3400 Olive St.  
 Hopkins, T. A., 319 Century Bldg.  
 Horwitz, M. R., 3000 Olive St.  
 Houser, K., Century Bldg.  
 Houck, E. F., 1638 S. 26th St.  
 Houck, L., 903 Morrison Ave.  
 Houwink, J. J., 795 Bayard Ave.  
 Howard, A. P., Linmar Bldg.  
 Hughes, C. H., 3872 Washington Ave.  
 Hypes, B. M., 2005 Victor St.  
 Jacobson, H., Mo. Trust Bldg.  
 James, J. A. J., Carleton Bldg.  
 Jenda, J. J., 2521 S. Broadway.  
 Jennings, J. E., Carleton Bldg.  
 Jennings, M. D., 4101 Washington Ave.  
 Johnson, E. H., 2507 N. Spring Ave.  
 Johnson, F. P., 3744 Finney Ave.  
 Johnson, W. L., 2241 S. Grand Ave.  
 Johnson, H. McC., Linmar Bldg.  
 Jonas, E., 4474 Westminster Pl.  
 Jones, M. D., 4068 Washington Ave.  
 Jordan, A. P., 2755 Osage St.  
 Kane, R. E., 1123 N. Grand Ave.  
 Keber, J. B., 448 Century Bldg.  
 Keeble, R. R., Mo. Pac. Hospital.  
 Keith, W. F., Carleton Bldg.  
 Kessler, E. H., 3446 Shenandoah Ave.  
 Kennedy, W. U., 18th & Cass Ave.  
 Kieffer, A. R., 4268 W. Belle Pl.  
 Kieffer, Victor B., City Hospital.  
 Kier, W. F., 3609 Lindell Bl.  
 Kimball, A. C., Grand & Franklin Ave.  
 Kirchner, W. G. C., 1211 N. Grand Ave.  
 Klein, S., 1921 N. Grand Ave.  
 Koch, J. V., City Hospital.  
 Koenig, G. W., 740 S. 4th St.  
 Koetter, A. F., 1023 N. Grand Ave.  
 Krebs, G. A., 2709 S. 11th St.  
 Krebs, F. J. V., 2816 N. 14th St.  
 Krenning, W. J., 4326 Easton Ave.  
 Kuhn, D., 1746 Chouteau Ave.  
 Laidley, L. H., 308 N. 6th St.  
 Lange, A. F., 2755 Osage St.  
 Langan, W. J., Plymouth & Goodfellow Aves.  
 Lare, H. S. P., 4552 Morgan St.

Larew, J. L., 3030 Morgan St.  
 Lawrence, W. S., 1913 N. Grand Ave.  
 Lebrecht, J. C., 900 S. 4th St.  
 Leighton, W. E., 926 Academy Ave.  
 Lemen, J. R., Vanol Bldg.  
 Lewis, Bransford, 627 Century Bldg.  
 Lewis, Chas., 1402 Monroe St.  
 Levy, A., Lister Bldg.  
 Lightner, C. R., 2313 Washington Ave.  
 Link, J. J., Mermod-Jaccard Bldg.  
 Lippe, M. J., 4321 W. Belle Pl.  
 Lischer, R. F., Mt. Olive, Ill.  
 Loeb, C., Humboldt Bldg.  
 Loeb, H. W., Humboldt Bldg.  
 Long, J. M., 513 Sarah St.  
 Luedeking, R., 1837 Lafayette Ave.  
 Lutz, L. S., 1023 N. Grand Ave.  
 Lutz, F. J., 1630 S. Grand Ave.  
 Lyman, H., Carleton Bldg.  
 Mann, F. P., 1536 Papin St.  
 Mardorf, W. C., 1111 Chouteau Ave.  
 Marks, H., 2930 Morgan St.  
 Martin, T. A., Century Bldg.  
 Marx, Ella, 4269 Delmar Ave.  
 Max, C. O. C., 2747 Lafayette Ave.  
 McCandless, W. A., 3857 Westminster.  
 McClure, J., 1702 Market St.  
 McKay, H. S., 2643 Geyer.  
 McLean, Mary H., 4339 Delmar Bl.  
 Meisenbach, A. E., Jefferson Bldg.  
 Meisenbach, A. H., 2229 S. Broadway.  
 Melvin, J. M., 3205 Washington Ave.  
 Menestrina, J. F., 3409 Washington Ave.  
 Meng, E. R., 728 N. Taylor Ave.  
 Meyer, H. H., 1823 N. Taylor Ave.  
 Miller, H. E., 2257 Missouri Ave.  
 Miller, J. J., 4439 Morgan St.  
 Mills, R. Walter, 2235 S. Vandeventer Ave.  
 Missimore, L. E., 1823 N. Taylor Ave.  
 Mook, W. H., 2602 Locust St.  
 Moore, B. W., 3634 Washington Ave.  
 Moore, H. M., Linmar Bldg.  
 Moore, J. G., 5259 Page Bl.  
 Moore, J. W., 906 Pine St.  
 Moore, W. G., 86 Vandeventer Pl.  
 Morfit, J. C., 5101 Morgan St.  
 Morris, C. C., 2945 Franklin Ave.  
 Mosby, C. V., 2313 Washington Ave.  
 Mudd, H. G., Humboldt Bldg.  
 Mueller, E., 3334 California Ave.  
 Muetze, Henry, 3201 Shenandoah Ave.  
 Murphy, J. C., 4263 Morgan St.  
 Murphy, R. B., 6035 Manchester Ave.  
 Myer, J. S., 3894 Washington Ave.  
 Neuhoof, F., 1318 Chouteau Ave.  
 Newman, L. E., 449 Century Bldg.  
 Nicholson, C. M., Lister Bldg.  
 Nicks, H. G., 933 Goodfellow Ave.  
 Nietert, H. L., Century Bldg.  
 Nifong, F. G., Columbia, Mo.  
 Norris, E. J., 4323 Russell Ave.  
 North, E. P., 3920 Russell Ave.  
 Ohmann-Dumesnil, A. H., 5 S. Broadway.  
 O'Reilly, R. J., 602 N. 7th St.  
 Orr, C. J., 3343 Morgan St.  
 Outten, W. B., Mo. Pac. Hospital.  
 Padberg, L. R., 2759 Armand.  
 Parker, C. W., 3502 N. Jefferson Ave.  
 Patton, F. W., 5617 Maple Ave.  
 Pfeifferberger, J. M., Humboldt Bldg.  
 Phillips, G. M., 520 Olive St.  
 Pierce, H. M., 4046 N. Grand Ave.  
 Pim, L. T., Mo. Trust Bldg.  
 Pollman, L. P., 2002 St. Louis Ave.  
 Popper, M., Mermod-Jaccard Bldg.  
 Porter, Wm., 520 Olive St.  
 Porterfield, E. P., 4635 Easton Ave.  
 Post, H. M., 27th & Washington Ave.  
 Powell, C. H., Century Bldg.  
 Pritchard, J. B., 3203 Easton Ave.  
 Printz, H., Century Bldg.  
 Rassieur, L., City Hospital.  
 Ravold, A., 312 Century Bldg.  
 Reder, F., 4629 Cook Ave.



Remme, C. F., 400 S. 14th St.  
 Rice, D. F., Century Bldg.  
 Riesmeyer, L. T., 2838 Lafayette Ave.  
 Riley, C. M., Alton, Ill.  
 Riley, R. D., 4641 Washington Ave.  
 Ring, Frank, Chemical Bldg.  
 Robinson, A. C., 5083 Westminster Pl.  
 Robertson, W. M., 2608 Locust St.  
 Rohlfing, C. G., 1200 N. 8th St.  
 Rohlfing, H. A. L., 2602 Laclede Ave.  
 Rohlfing, L. C., 3914 Maffit Ave.  
 Rosebrough, F. H., Grand & Bell Aves.  
 Ross, J. B., 1908 E. Grand Ave.  
 Rothstein, H. B., 3309 S. 13th St.  
 Rule, J. B., Olivia Bldg.  
 Rumbold, F. M., 450 Century Bldg.  
 Rush, W. M., 805 N. Grand Ave.  
 Rusk, E. E., 2945 Lawton.  
 Russler, J. J., 2622 S. Jefferson Ave.  
 Salter, J. C., 520 N. Grand Ave.  
 Sauer, W. E., Olivia Bldg.  
 Saunders, E. W., 3003 Lafayette Ave.  
 Saxl, Ernst, Century Bldg.  
 Scherck, H. J., 403 Century Bldg.  
 Schisler, E., 2027 S. Jefferson Ave.  
 Schlossstein, A. G., 3153 Longfellow.  
 Schlueter, R. E., 720 S. 4th St.  
 Schmalhorst, D. E., 811 N. Broadway.  
 Schmidt, W. C., 2417 S. Broadway.  
 Scholz, F., 3403 N. 14th St.  
 Scholz, R. P., 1110 Ferry St.  
 Schuehat, W. L., 2200 Chouteau Ave.  
 Schulte, F. A., 2447 N. Spring Ave.  
 Schulz, H. W., 2603 Cherokee Ave.  
 Schwab, S. I., Vanol Bldg.  
 Schwarz, H., 440 N. Newstead Ave.  
 Schwarze, A., 2921 S. Jefferson Ave.  
 Shanklin, Ben., 2734 Chouteau Ave.  
 Shapleigh, J. B., 2608 Locust St.  
 Sharpe, N. W., 3520 Lucas Ave.  
 Shattinger, C., 2924 S. Grand Ave.  
 Shields, W. B., Linmar Bldg.  
 Shoemaker, J. F., Carleton Bldg.  
 Shoemaker, W. A., 1006 Carleton Bldg.  
 Shutt, C. H., City Hospital.  
 Senseney, E. M., 2829 Washington Ave.  
 Sieving, H. J. C., 1125 St. Louis Ave.  
 Simon, J. H., 4104 Manchester Ave.  
 Sluder, G., 2647 Washington Ave.  
 Smith, Elsworth, 116 N. Grand Ave.  
 Smith, J. C., 3634 Washington Ave.  
 Smith, J. W., Mermod-Jaccard Bldg.  
 Snodgrass, C. A., 1624 Chestnut St.  
 Soper, H. W., 813 N. 18th St.  
 Spain, K. C., Carleton Bldg.  
 Spencer, H. N., 2723 Washington Ave.  
 Spiegelhalter, J., 2166 Lafayette Ave.  
 Spooner, E. H., 1116 Talmage Ave.  
 Stahl, S. S., 4500 Olive St.

Stauffer, W. H., Humboldt Bldg.  
 Steedman, J. G. W., 2803 Pine St.  
 Steer, J., 3126 Washington Ave.  
 Stevens, C. D., 1749 S. Grand Ave.  
 Stewart, F., 1001 Olive St.  
 Stocking, L. C., 1304 Academy Ave.  
 Stockwell, B. E., 2345 S. Broadway.  
 Suggett, O. L., 423 Commercial Bldg.  
 Summa, Hy. H., 3707 N. 11th St.  
 Summa, Hugo, 2249 St. Louis Ave.  
 Sutter, O., Century Bldg.  
 Stoffel, R. J., 2754 Armand Ave.  
 Talbott, H., 3153 Laclede Ave.  
 Tanquary, J. H., 930 Belt Ave.  
 Taussig, A. E., 3519 Washington Ave.  
 Taussig, F. G., 534 N. Vandeventer.  
 Tiedemann, E. F., 2253 S. Vandeventer.  
 Todd, D. C., 4115 Finney Ave.  
 Tooker, Chas. W., Jr., 4326 Pine St.  
 Trotman, C. A., 3524 Lawton Ave.  
 Tuholske, H., 465 N. Taylor Ave.  
 Tuholske, M. C., Female Hospital.  
 Tupper, P. Y., 534 N. Vandeventer Ave.  
 Tuttle, G. M., 3509 Morgan St.  
 Valle, J. F., 3303 Washington Ave.  
 Vandover, S. T., 1536 Papin St.  
 Vasterling, Paul, Mo. Pac. Hospital.  
 Vaughan, J. W., 4001 W. Belle Pl.  
 Viedt, E. J., 2251 S. Grand Ave.  
 Vitt, Rudolph, 3860 S. Broadway.  
 Vogler, A. F., 2037 Fair Ave.  
 Vogt, G. W., 1455 Blair Ave.  
 Vogt, W. H., 1455 Blair Ave.  
 Vollmer, P., 2358 S. 12th St.  
 Von der Au, O. L., 1301 Geyer Ave.  
 Vosberg, C. A., Centenary Hospital.  
 Ward, E. P., 2831 Shenandoah Ave.  
 Ware, Chas., 1404 Olive St.  
 Warfield, L. M., Chemical Bldg.  
 Weinsberg, H. A., 1015 Marion St.  
 Weiterer, H. L., 2728 N. 11th St.  
 Wesseler, F. W., 2308 Gravois Ave.  
 Whelpley, H. M., 2342 Albion Pl.  
 Wiatt, W., East St. Louis, Ill.  
 Wichmann, H. L., 1418 S. 17th St.  
 Wiener, M., 500 Carleton Bldg.  
 Wilkes, B. A., Linmar Bldg.  
 Williamson, J. W., 5600 Cates Ave.  
 Williamson, L. P., 5600 Cates Ave.  
 Wilson, A., 1514 Wagoner Pl.  
 Wilson, R. E., 512 Mo. Trust Bldg.  
 Wilson, W. A., 1536 Papin St.  
 Winter, Wm., 3632 S. Broadway.  
 Witherspoon, T. C., 4318 Olive St.  
 Wolfner, H. L., Carleton Bldg.  
 Woodruff, F. E., 2925 Washington Ave.  
 Wyche, Chas., 401 N. Grand Ave.  
 Zahorsky, John, 1460 S. Grand Ave.  
 Zoller, C. H., 1235 N. Grand Ave.

## STODDARD COUNTY.

D. R. CORBIN, President.

JNO. ASHLEY, Secretary.

### MEMBERS.

Allen, T. C., Bernie.  
 Ashley, John, Bloomfield.  
 Bilbrey, F. H., Puxico.  
 Brandon, J. P., Essex.  
 Burris, L., Puxico.  
 Caldwell, W. C., Essex.  
 Corbin, D. R., Bloomfield.  
 Douglas, Jno., Dexter.  
 Evans, S. M., Bloomfield.

Hill, A. D., Dexter.  
 LaRue, Harry, Dexter.  
 Moore, Ed., Bloomfield.  
 Phillips, Eldon, Bloomfield.  
 Tiller, J. A., Leora.  
 Vernon, Geo., Dexter.  
 Wilson, Eli, Leora.  
 Wingo, T. B., Dexter.

## SULLIVAN COUNTY.

J. C. KESSINGER, President.

J. S. MONTGOMERY, Secretary.

### MEMBERS.

Helton, J. W., Green City.  
 Kessinger, J. C., Milan.  
 Mairs, E. J., Newtown.  
 Montgomery, J. S., Milan.

Porter, E. S., Milan.  
 Widner, A. W., Newtown.  
 Witter, W. L. M., Milan.

## VERNON COUNTY.

H. C. JARVIS, President.

T. B. TODD, Secretary.

## MEMBERS.

Adams, W. T., Richards.  
 Buchanan, J. Robt., Nevada.  
 Bohannon, W. T., Nevada.  
 Churchill, E. R., Nevada.  
 Craig, T. B. M., Nevada.  
 Callaway, L. H., Nevada.  
 Davis, C. B., Walker.  
 Johnson, S. A., Nevada.  
 Jarvis, H. C., Shell City.  
 Keithly, C. L., Nevada.

Milikan, G. S., Shell City.  
 McLemore, T., Nevada.  
 Popplewell, W. H., Sheldon.  
 Robinson, J. F., Nevada.  
 Smith, A. P., Metz.  
 Todd, T. B., Richards.  
 Truex, J. L., Milo.  
 Wilson, G. C., Nevada.  
 Yater, J. M., Nevada.

## WARREN COUNTY.

W. J. ALEXANDER, President.

E. A. FLUESMEIER, Secretary.

## MEMBERS.

Alexander, W. J. Marthasville.  
 Dyer, J. H., Warrenton.  
 Foreman, J., Warrenton.  
 Fluesmeier, E. A., Wright City.

Graham, A. W., Warrenton.  
 McKinney, Geo. F., Warrenton.  
 Mitchell, E. G., Wright City.  
 Stewart, James, Holstein.

## WASHINGTON COUNTY.

J. A. EATON, President.

W. S. SMITH, Secretary.

## MEMBERS.

Eaton, J. A., Belgrade.  
 Ford, David, Richwoods.  
 Hall, Jas. H., Potosi.  
 Hall, L. T., Potosi.

Parker, W. H., Anthonies Mills.  
 Parker, W. J., Berryman.  
 Smith, W. S., Belgrade.  
 Townsend, J. P., Potosi.

## WAYNE COUNTY.

J. P. SEBASTIAN, President.

R. J. OWENS, Secretary.

## MEMBERS.

Atkins, F. R., Jackson.  
 Bailey, W. S., Leeper.  
 Barnett, I. N., Piedmont.  
 Bates, S. A., Piedmont.  
 Gilmer, J. E., Piedmont.  
 Hale, Jesse W., Greenville.

Jones, C. H., Brunot.  
 Montgomery, J. M., Lowndes.  
 Owens, R. J., Mill Spring.  
 Sebastian, J. P., Patterson.  
 Sheets, C. C., Greenville.  
 Toney, G. W., Piedmont.

## WORTH COUNTY.

O. P. M. MILLS, President.

J. K. PHIPPS, Secretary.

## MEMBERS.

Andrews, John, Grant City.  
 Dove, J. D. F., Allendale.  
 Gately, Villa, Grant City.  
 Long, A. C., Denver.  
 McKinley, W. E., Grant City.  
 Mills, H. P., Sheridan.

Mills, O. P. M., Grant City.  
 Nesbitt, E. P., Sheridan.  
 Phipps, J. K., Grant City.  
 Robertson, W. A., Allendale.  
 Smith, T. J., Grant City.

# COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	W. G. Stafford	Tarkio	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Lamar.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas W Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	R. K. Dodge	Palo	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	J. D. Porterfield, Jr.	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	S. Triplett	Harrisonville.
Chariton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Plattsburg.
Cole	J. P. North	Jefferson City	G. Etmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	J. R. Lionberger	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	N. E. Sutton	Trenton	W. H. Winingham	Trenton.
Harrison	A. H. Vandvert	Bethany	W. H. Wiley	Idgeway.
Henry	W. M. Shankland	Clinton	F. M. Douglas	Clinton.
Holt	C. L. Evans	Oregon	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	L. S. Brown	Edina	Henry J. Jurgen	Edina.
Laclede	J. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	W. H. Miller	Macon	C. W. Reagan	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmore	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman	Uman	G. D. Walker	Eldon.
Mississippi	P. P. Boggan	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	J. W. Lamson	Neosho	Horace Bowers	Neosho.
N. W. Madrid	Welton O'Bannon	New Madrid	C. W. Watson	New Madrid.
Nodaway	F. R. Anthony	Maryville	L. E. Dean	Maryville.
Pemiscot	J. G. Luten	Caruthersville	John Johnson	Hayti.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
Phelps	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Orrick	Crocker.
Putnam	C. H. Carryer	Hartford	A. Townsend	Unionville.
Ralls	W. S. Harwood	Rensselaer	T. J. Downing	New London.
Randolph	G. O. Cuppaldge	Moberly	W. M. Dickerson	Renick.
Ray	L. D. Greene	Richmond	E. F. Higdon	Richmond.
Reynolds	J. M. Lowery	Centerville	T. W. Chilton	Corridon.
Ripley	S. A. Proctor	Doniphan	J. F. Redwine	Doniphan.
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	B. K. Stumberg	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	C. A. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	J. C. Kessenger	Milan	S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeler	Wright City.
Washington	J. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	J. P. Sebastian	Patterson	R. J. Owens	Mill Spring.
Worth	O. H. P. Mills	Grant City	J. K. Phipps	Grant City.



# MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair .....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew .....	Monthly. First Wednesday.
Atchison .....	Quarterly. January, April, July, October.
Audrain .....	Monthly. First Monday.
Barton .....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates .....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone .....	Monthly. First Monday.
Buchanan .....	Semi-Monthly. First and Third Saturday.
Butler .....	Weekly. Fridays.
Caldwell .....	Quarterly. July, October, January, April.
Callaway .....	Monthly. Second Thursday.
Camden .....	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau .....	Monthly. Second Wednesday.
Carroll .....	Second Tuesday.
Carter-Shannon .....	Quarterly. February, May, August, and November.
Cass .....	Quarterly. First Thursday of March, June, Sept. and Dec.
Chariton .....	Monthly. Last Thursday.
Clark .....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay .....	Monthly. Last Monday.
Clinton .....	Monthly. First Tuesday.
Cole .....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper .....	Monthly. First Tuesday.
Crawford .....	Quarterly. First Tuesday. April, July, October, January.
Davies .....	Quarterly. January, April, July, October.
Dunklin .....	Monthly. Second Tuesday.
Franklin .....	Monthly. First Tuesday.
Gasconade-Maries-Osage .....	Semi-Annual. Fourth Thursday, April and October.
Greene .....	Weekly. Saturday.
Grundy .....	Quarterly. July, October, January, April.
Harrison .....	Quarterly. Third Tuesday, January, April, July, October.
Henry .....	Quarterly. Second Wednesday, Dec., March, June, Sept.
Holt .....	Quarterly. First Thursday, January, April, July, October.
Howard .....	Monthly. Third Tuesday.
Howell .....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron .....	Monthly. First Saturday.
Jackson .....	Semi-Monthly. Second and Fourth Thursdays.
Jasper .....	Semi-Monthly. First and Third Mondays.
Jefferson .....	Monthly. Fourth Tuesday.
Johnson .....	Quarterly. June, September, December, March.
Knox .....	Monthly. First Monday.
Laclede .....	Quarterly. Second Monday, Jan., April, July, Oct.
Lafayette .....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln .....	Quarterly. May, August, November, February.
Linn .....	Quarterly. October, January, April, July.
Livingston .....	Monthly. Third Wednesday.
McDonald .....	Quarterly. Second Wednesday, Jan., April, July, Oct.
Macon .....	Monthly. Second Tuesday, 10 a. m.
Madison .....	Semi-Monthly. First and Third Monday.
Marion .....	Monthly. First Friday.
Mercer .....	Monthly. Second Thursday.
Miller .....	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi .....	Monthly. First Monday.
Moniteau .....	Quarterly. March, June, September, December.
Monroe .....	Quarterly. First Tuesday of April, July, October, January.
Montgomery .....	Monthly.
Morgan .....	Quarterly. First Wednesday of March, June, Sept., Dec.
New Madrid .....	
Newton .....	Monthly. Second Tuesday.
Nodaway .....	Monthly. Second Tuesday.
Pemiscot .....	Quarterly. First Tuesday, January, April, July, November.
Perry .....	Monthly. First Wednesday.
Pettis .....	Semi-Monthly. First and Third Monday.
Phelps .....	Quarterly. March, June, September, December.
Pike .....	Monthly.
Platte .....	Monthly. First Wednesday.
Pulaski .....	Quarterly. November, February, May, August.
Putnam .....	Monthly. First Wednesday.
Ralls .....	Quarterly. January, April, July and October.
Randolph .....	Monthly. Second Tuesday.
Ray .....	Monthly. Third Wednesday.
Reynolds .....	Quarterly. January, March, June, October.
Ripley .....	
Saline .....	Monthly. Second Tuesday.
St. Charles .....	Monthly.
St. Clair .....	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve .....	Monthly. Second Wednesday.
St. Louis .....	Weekly. Saturdays.
St. Louis County .....	Monthly. Second Wednesday.
Schuyler .....	Semi-Annually. July and December.
Scotland .....	Monthly. Second Tuesday.
Shelby .....	Quarterly. June, September, December, March.
Stoddard .....	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan .....	Monthly.
Vernon .....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren .....	Monthly.
Washington .....	Monthly. First Saturday.
Wayne .....	Monthly.
Worth .....	Monthly. Second Wednesday.

## AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.

President-Elect: WM. J. MAYO, Rochester, Minn.

President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May, 1906.

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### Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

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Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

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\*Counties in black type are unorganized.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

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## ORIGINAL ARTICLES

### TEN YEARS' EXPERIENCE WITH THURE BRANDT'S MASSAGE IN THE TREATMENT OF CHRONIC DISORDERS OF THE FEMALE GENITAL ORGANS.\*

By J. B. Ross, M. D., St. Louis.

In 1893, last September twelve years ago, I was admitted as a pupil in Major Thure Brandt's private sanatorium for gymnastics and massage, at Stockholm, Sweden. There were about a dozen patients coming daily for treatment, some of whom refused my presence at the sittings, others permitted me to be present while others, moved by altruistic sentiments, allowed me to examine and massage under the supervision of the Major. Whenever I was present at the sittings the Major would outline the whole course of treatment, give the anatomical diagnosis, explain the different massage movements and give the reason why a certain movement had to be made in a certain way and in no other. After leaving Stockholm, I applied, on the advice of Thure Brandt, for admission into Dr. Theodore Landem's Gynecological Poly-

clinic at Berlin, Germany. While there I was given ample opportunity to massage such cases as were considered likely to be benefitted. Ever since the year 1890, when I resumed practice, hardly a day has passed that I had not one or the other under treatment.

Almost one of the first cases that I had to treat was one of prolapsus vaginae et decensus uteri retroflexi. Several gynecologists have doubted the possibility of such cases being permanently cured by Thure Brandt's method. During my conversation with the Major on the different degrees of prolapsus I learned that he felt very sore at having been mistrusted about the care of such cases. He told me many a time, that he had invited, in the beginning of his career, some of the gynecologists of Stockholm to investigate and control his method, but

\*Read before the St. Louis Medical Society, November 18, 1905.



none, save one, had responded.

In the year 1886 Dr. Paul Trofanter, who was sent by Mr. Robert Nobel to investigate his method, prevailed upon the Major to present his method to Professor Schulze, of Jena. Thure Brandt, accompanied by Dr. Nissen, treated several cases under the constant control of the professor. The profession seemed to take interest in the method for some time, but, alas! classical methods, "ventro-fixation, vaginofixation, Alexander's operation," etc., have swept away the nascent interest in Thure Brant and his system.

If you present to your mind the anatomy of the suspensory system and its finer histological details, consider the functions of the different structures which compose the whole suspensory apparatus, recapitulate the different ways of massage and gymnastics employed in such cases, I do not think you will have much difficulty to understand that a cure is not alone possible, but perfectly rational.

The only difficulty in the execution of the "uterus lifting" consists in the retaining of the organ in the normal position during the lifting. If the uterus slips back during the procedure into the abnormal position you do more harm than good. It has happened to me several times, but after a few trials I succeeded all right.

The most common forms of abnormalities met with in the female pel-

vis is malposition of the uterus et adnexa. As long as a retroverted or retroflexed uterus does not manifestly cause any trouble or annoyance I take it for a normal organ, or better, an abnormally normal one. Those that cause trouble may be divided into movable and fixed malposition. I would advise you never to stick to a once-formed diagnosis of a movable or fixed organ even after repeated examinations, not even after successfully replacing the organ by sound or under anesthesia. I have on several occasions treated by massage retroflexions which seemed to all appearances firmly fixed. Every attempt at anteflexion failed. Then after a varied period of massage, having reduced the hypertrophy of the organ, having removed all inflammatory deposits that I could detect in the neighboring parts, I succeeded one morning quite easily in reducing the organ. Sometimes the uterus will remain in the normal position after you have replaced it for several mornings; at other times you find it every morning again in the retroposition. For this latter incident I have found several reasons. First of all a hard induration in the corpo-cervical angle; patient massage will cure this. Sometimes you find the organ for several days in normal position; all at once it has slipped back again. If I can reduce the uterus without any difficulty, well and good, but the moment I find any resistance I desist. use calming massage and wait till

the next morning. To my surprise I find it sometimes next day again in normal position; if not I try again, look for the cause of the accident and endeavor to remove it. In most cases I hear of hard work the previous day, washing, ironing, scrubbing, etc. Sometimes I cannot find any reason.

Another cause of the slipping back of the uterus is shortening of the sacro-uterine ligament, laxness of round ligaments, etc. Where the round ligaments and other parts are too lax to hold the uterus in normal position, their functions having been reduced by non-use, their muscular fibers wasted by want of exercise, the method of massage which restores tone and function, supplemented by uterus lifting and gymnastics will effect a cure.

In the beginning of my career I made the mistake of stretching the sacro-uterine ligaments too much and letting them slip back suddenly; purposely at times but at others they would slip off my finger. Under these conditions harm will follow. The uterus is then sometimes found so firmly fastened into the pelvic cavity as to impose a fixed retroflexion. As soon as I learned my mistake and altered my ways this seldom happened. I massage gently, stretch the ligaments to a certain point, taught by previous experience, and let them slip back gradually. In some cases I never succeeded in retaining the organ in the normal position. Small and very

thin adhesions are said to be the cause in some instances, in others you find a thickening and shortening of the retroperitoneal covering of the uterus as responsible for this condition. As these cases, when previously treated by massage, do not cause gross inconvenience, patients are perfectly satisfied with results obtained.

The fixed retroflexions are sometimes hard to cure. It is almost always a tedious task but they are very grateful subjects for massage. Many a time did I have for treatment women, who before they came to me, were complete wrecks, unable to attend to their household duties, not a day without suffering. After a few months of treatment they were perfectly capable to resume the hardest work of the household, take in washing and ironing, although the uterus remained in the malposition. But at this time every trace of inflammatory induration in and around the uterus had disappeared, the uterus, although not completely free and loose, was sufficiently movable to follow all necessary intra-abdominal displacement. A retroflexion is no disease *ipso facto*, does not cause, as such, any trouble notwithstanding what the text books say. All operations without previously restoring parts to their normal conditions, are unscientific and bound to meet with failure, exceptions granted.

I spoke just now about inflammatory indurations and hardenings.

There are some places of predilection. The corpo-cervical angle is a most likely place. Here I have found at times an extreme degree of sensitiveness and pain. If you do not commence massage very, very carefully your patient will not come again. I begin with about one-half minute's massage round the most sensitive area, go slowly on and I am almost always surprised how rapid the progress of such cases is. Other places of induration are, base of the ligamentum latum, ligamentum utero-ovaricum, the surrounding of a displaced ovary or tube. In all these cases I had to learn not to do too much at the start, but even now I make mistakes; every case is a study in itself. The longer I massage my cases the more I sometimes find to massage. Small indurations which slipped my observation are detected after weeks of massage and certain symptoms that resisted up to then all treatment, rapidly disappear. Very resistant to treatment were those deposits I found in the ligamentum utero-ovaricum. Patience on both sides is necessary in almost every case of this kind.

During the International Medical Congress at Paris in 1900, I learned during a casual conversation, of an affection which I have met with several times since, viz., the effects of coitus interruptus and other practices. I do not refer to the deleterious influences of these practices on the nervous system of the sensitive and sensual woman. I will just

draw your attention to the results they have on the sexual organs.

Examine a newly married woman and you will find that in the beginning of such practice, the want of the orgasm experienced time after time will cause a very painful contraction of the ligamenta sacro-uterina. If this practice is kept up for any length of time you will find an induration of the corpus uteri and also a straightening of the corpo-cervical angle, the whole organ in retroflexion. I have at present one of the latter category under my care and the progress I have made so far in about four weeks of treatment is discouraging. If you can convince them that "*cessante cause, cessat effectus*," everything will return to normal in a short while. In the more chronic forms massage has to treat the induration. But as this practice is kept up in most cases its results do not disappear completely.

One of the most common complaints of the married as well as unmarried woman is dysmenorrhoea, taking this word in its largest application. Here again I must put myself in opposition to some of the text books. I do not believe that in most cases the cause is a mechanical one. It takes, sometimes, a careful search to find the cause of this annoyance, to say the least of it. In a young girl with an intact hymen I found a descended and walled-in ovary as the cause of the trouble. The dysmenorrhoea was accompanied in this case with an almost incessant



desire to urinate. Massage per rectum—I always examine girls with an intact hymen per rectum and massage also per rectum—massage I said, was very distressing in the beginning causing contraction of the abdominal muscles. In other cases I found induration in corpori uteri, sometimes in corpo-cervical angle, sometimes in the tubes, etc. Most cases taxed the patience of both of us before a cure was perfected. I do not refer here to cases of dysmenorrhoea which you can relieve by administration of internal medicines, but to those only that resist your therapeusis and demand an examination.

You find cases of dysmenorrhoea where the pain commences hours before the flow appears; there are others where the pain is not felt till twenty-four or forty-eight hours after the onset. Sometimes girls are free from all inconvenience before or during their menses, but a few months after being married complain for the first time. Since I have practiced Thure Brandt's method I never resorted to instrumental interference. My results are very satisfactory, a fact in most cases unexplainable if a mechanical obstruction were the cause of this trouble. I can assure you it takes often a repeated examination supplemented by massage before the cause of the trouble is detected. *Ou est le gonococcus?*

Giving birth to a child will sometimes cause incontinentia urinæ.

Where the cause is a paresis of the sphincter vesicæ the Thure Brandt method will often quickly cure this annoyance. In one case my results were lacking in efficiency. I questioned the woman several times, got suspicious, made an ocular examination and found a vesico-vaginal fistula. Dr. Bernays operated on the case with perfect result. My experience in gonorrhoeic affections has been very discouraging. Sometimes I commenced too early and the cases would go from bad to worse; at other times the progress made was so slow, the improvement in subjective conditions, even after weeks of massage, so slight that the patients left off coming. My last case seems more promising. Three years before last attack had acute pyosalpinx of right side which perforated into intestinal tract before it had come down far enough into Douglass' cul-de-sac to permit of safe opening. The last attack was on the left side. A few days afterwards there appeared a gonorrhoeal arthritis of the right knee which was easily cured by Bier's constriction hyperaemia. A day or two before menses appeared the pyosalpinx discharged per uterum. The progress is more than satisfactory.

Although I have made it my practice to observe the expression of my patient during massage I have met with accidents. You will find patients who will make a face on the slightest unpleasant sensation and cry out about awful pain. If you are taken by these your work will

not be satisfactory. There are, however, others who, from the mistaken idea that the greater the pain the better the results, or the like, hide their suffering and induce you to massage more vigorously than you ought to. The result is often an exacerbation of the infiltration and exudation at the seat of the trouble. If necessary I keep these cases in bed two or three days, commence then again very slowly. A few sittings generally suffice to have the exudation resorbed. Another cause of such accidents are brisk walks, climbing steps, car riding, too heavy work, etc.

The average sufferer from female troubles complains of symptoms amongst which headache, backache, pain down along the thighs, flatulence, dyspepsia, constipation, etc., return with a remarkable obstinacy. As long as these are dependent upon a detected anatomical lesion, pressure exercised in *loco lesionis* will elicit the symptom. I could often produce in this way a remote neuralgia, nausea, severe pain in back or around the crista ilii, etc. Of all the symptoms which disappear the soonest after massage is started, headache and constipation are the first. There are, however, cases of headache where I do not find even after months of massage any anatomical foundation. Some of these headaches disappear with each pregnancy, to reappear sooner or later after the birth. In one case of about eleven years standing it took months

and months of patient massage, but once cured she remained cured. The alteration that has taken place in the woman is simply astonishing.

In all such cases where I could not detect any cause for the trouble I followed a general depletory massage. Although I do not believe in the unrestricted and unfounded application of the term "autoinfection," I think we are entitled to apply this term like the above. That I do not find any anatomical lesion does not prove that there does not exist any such lesion; on the contrary a cure effected by massage proves the anatomical foundation for those headaches. That pathological tissue liberates chemical products which cause alterations of mostly subjective nature was proved to me again a few days ago. A woman with gonorrhoeic affection whom I had massaged for a short while only, experienced a most decided depression besides the reappearing of constipation, while I was obliged to leave off massage for four days. Two days after recommencing she voluntarily stated that she felt well again. That the constipation was not the cause of the depression is proved by the fact that she was free from the latter during the treatment although constipated for a day or two sometimes.

Constipation dependent upon any female trouble will soon disappear after massage has commenced. No special method for massage is necessary. In those cases, however, of

idiopathic constipation a proper form of massage has to be instituted. If this form were applied to any kind of genital lesion it might do harm.

Since the creation of the term "autointoxication" another appeared on the scene, viz: *habitas asthenicus*, formerly called *habitas paralyticus*. A very interesting case of this kind was under my care some years ago. When I saw the girl first, then about eleven years old, she was unable to walk the distance of a few rooms. General massage of the whole body supplemented by graduated gymnastic exercises and the special massage of genital organs which were fully developed, soon improved the girl's condition. After a few months of treatment I left the city. October, 1905, about seven years after I saw her last, I heard from her. She is still in delicate health but not phthisical. In some cases where I did not meet with satisfactory progress, I proposed as indicated by Dr. Nissen and accepted by Thure Brandt, to continue massage during menses. Where the patients consented I was pleased with the results obtained. Infiltration, indurations, etc., which have resisted your best efforts, will soften and decrease during this period. The only incident I met with was the appearance of an urticaria-like eruption which did not much inconvenience the patient and disappeared with the cessation of the menses.

I would like to draw your attention to one circumstance which has some-

times forced me to abandon massage, namely, car riding. Patients who had made good progress as long as they could get to my office on foot, failed to make any headway the moment they had to take a long car ride to my office. This I noticed especially in those who had lately come under treatment. After a certain improvement had taken place some were not affected, others had to abandon the treatment. Thure Brandt advised all his patients to walk to his office.

Several times I have been asked whether massage does not excite any erotic feelings. I follow the rule to mention this point to my patients the first time I treat them. I follow, furthermore, implicitly the rule of Thure Brandt for massage and this incident never happened to me as far as I am aware of.

Permit me to refer briefly to a paper read by Dr. A. R. Kieffer before the Missouri State Medical Association, Excelsior Springs, May, 1905.

As the paper deals with almost the same subject as mine of tonight, I feel very grateful to the author for having drawn such prominent attention to the anatomical and histological details of the contents of the female pelvis. Very properly is the introductory remark: "The whole subject of uterine displacements is predicated upon a knowledge of the normal anatomical support of the uterus and their several functions." The basis and rationale of Thure Brandt's method is a thorough



knowledge of the anatomy and histology of the female pelvis, a good understanding of the physiological functions of the suspensory ligaments, etc. The aim and purpose of the whole method is to restore the normal anatomical structure of the different organs, to enable the suspensory ligaments, etc., to resume their physiological functions, to strengthen the muscular apparatus, which completes, in one way or the other the whole system of the female pelvis. Now, I would ask you how an Alexander operation can restore "the whole apparatus in cases where the uterus is usually more or less undeveloped?" where "there is a general laxness of the structures forming the upper system of the support with the exception of the vesico-vaginal ligament. And as might be guessed this degree of laxness affects the ligaments in a ratio of their correspondence to the uterus in structure. The round ligaments being practically identical histologically are extremely lax." This strong and muscular ligament is partially cut, the remnant sewed to the abdominal wall, and then the whole suspensory apparatus as well as this crippled ligament have to restore their lost functions as best they can, by what means I would ask can they do so after, but not before the Alexander? By what means will the undeveloped uterus assume its normal condition after the operation if it could not do so before?

These are the very cases where

Thure Brandt's method will do wonders.

I feel obliged to most emphatically contradict another statement of the author, basing my objection on many, many cases treated, viz.: "Retrodeviation with adhesions requiring attention cannot be dealt with without opening the peritoneal cavity." How many cases of this kind I have treated I do not remember, but they form the majority in my experience, and these cause the most suffering, as those most of all incapacitate the women from work, they were selected by me in preference to others. Many a case has been perfectly cured, others were so far benefitted that they asked permission to discontinue treatment, although the uterus was not yet in perfectly normal condition. But all induration had disappeared, all unpleasant symptoms had gone, they felt as well as ever; one hour or two every day, or even every other day is a great loss to a woman who has to earn her living by hard work, or has a crowd of children to attend to.

I was astonished to read another statement, viz.: The commonest cause of such a state of subinvolution—subinvolution of the uterus and suspensory ligaments—is laceration of the cervix.

Ten years ago Emmet's operation was considered almost a "cure all," for the female sufferer; it meant at one time a mint of money to its able advocate. Examine your patients who have had children, how many do

you find with an intact cervix?

For years and years past I have considered a tear in the cervix as something incidental. The laceration, which persists, is not the cause of subinvolution. Remove by massage the old inflammatory deposits, soften cicatricial tissue, etc., and you will find that you have cured your patient, although she is still the happy possessor of a lesion entitling her to an Emmet.

If I have succeeded in directing your attention to this most effective method of treating a variety of female troubles I consider I have acquitted myself of some of my indebtedness towards its originator, the late Major Thure Brandt:

#### DISCUSSION.

Dr. F. J. Taussig said that many would agree with Dr. Ross as to the benefits to be obtained from massage where there was some objective lesion, such as a parametritic exudate, or some adhesion that could be broken up. But regarding cases of dysmenorrhoea in which there were no objective findings, he had made the statement that, because these patients got well under massage, therefore the result was due to the massage. That conclusion did not necessarily follow for there was undoubtedly in these nervous women a susceptibility to suggestion and the massage for a long time might produce the effect on the nervous system in that way. In regard to parametritis with cervical laceration, Dr. Kieffer's idea of the mode of infection

was the one usually accepted; as a result of the infection, there is an infiltration of the broad ligament. But when the cervical tear is sewn up, the exudate is not affected, so that the mere sewing up of the cervix could not be the cause of any direct improvement in the exudate.

Dr. B. L. Dorsey asked how long after an attack of gonorrhoea would Dr. Ross introduce this massage. He had known cases of infection in which twelve months later there was a tube development. And it should be remembered, too, that not even under an anesthetic was it possible always to determine the exact size of the tube. It was the same as in cystic ovaries. At an operation one sometimes found the ovary large yet before opening the abdomen it had been impossible to determine that fact.

Dr. George Gellhorn stated that Thure Brandt's treatment was a subject which deserved our earnest consideration. He had had a good opportunity of studying this method. Brandt went to Jena in 1886 to demonstrate his method of massaging to Prof. B. S. Schultze. He massaged fifteen cases. Dr. Gellhorn did not recall the diagnosis in each case but he knew that as late as 1895 the majority of these cases had remained well. The method had been in use in the university clinic of Jena ever since, and in 1898, when Dr. Gellhorn had become assistant there, he had learned to do the massage treatment, and how to select

the cases. Brandt's method was endorsed in Germany by Schultze and in Austria by Schauta. Of late, however, more reliable and less laborious methods of treatment for certain affections of the female genital organs had limited the usefulness of Brandt's method and today it should be used only in a certain well-defined class of cases. While he agreed with many of the sentiments expressed by Dr. Ross, the speaker differed with him in that he would not advise this massage for all affections of the female organs. It was mainly chronic inflammatory conditions in which massage was indicated. In metritis, to begin with, there were three stages, the acute, sub-acute and chronic. In the acute and sub-acute stages the uterus is swollen and edematous. If this condition is not interfered with the edema is slowly absorbed and fibrous tissue formed, and finally the uterus becomes very hard and heavy. In this stage no treatment would avail; it is simply an incurable condition. The second stage, that of sub-acute metritis, is the great field of usefulness for massage. Properly administered it would remove by depletion the excessive amount of fluid between the muscle fibers of the uterus, and by improving the circulation within the organ it would bring about a restoration of the organ to its proper size. It is true that metritis is very often in a certain relationship with laceration of the cervix. When in childbirth such a laceration occurs and the interstitial spaces are

opened, the ever-present infection can gain an entrance into the tissue both of the uterus and the parametrium and set up an inflammation. Consequently infection can be prevented by keeping the vagina clean. In other words, after a delivery in which these lacerations were suspected or actually detected, antiseptic douches should be employed and the subinvolution of the uterus would not fail to occur. How the later sewing up of this tear would cure the subinvolution he could not understand. In fact, Dr. Kieffer had stated that after sewing up the tear, he still had to resort to other treatment, such as hot douches.

Chronic inflammatory conditions of the Fallopian tubes and the ovaries also were conditions very suitable for the massage treatment. In salpingitis where a pyosalpinx had not yet been formed there was the swollen tube in which circulation was impaired. Here massage movements toward the periphery would remove the venous congestion and bring about a restoration of the affected parts. The effects of Thure Brandt's method were very notable in perioophoritis, in which the ovaries were very sensitive to the touch. This sensitiveness was brought about first by adhesions due to the swelling of the organ beneath the peritoneal covering, second, the inflammation which had affected the organs would affect the peritoneum itself and bring about a localized peritonitis. In such cases Brandt's method would be very efficacious, but



this alone would not effect a cure. It must be combined with other non-surgical procedures, of which there were many. There was the prolonged hot douche, the application of ichthyol and glycerine tampons, pressure weight treatment, rest in bed, general hygiene and last, but by no means least, the application of heated air, all of which would bring about an improved circulation in these parts and restore the patient to full health. It is inadvisable to resort to surgical operations as often as has been done in the past. The pendulum in the treatment of chronic inflammatory affections is swinging to the conservative side. At first there were only conservative methods: hot douches, tampons and treatment in watering places. Then, with antiseptics and asepsis, came the possibility of surgical interference. In the beginning, the appendages, only on the affected side, were taken out, then on both sides and at length that was not satisfactory, finally the most radical method, the extirpation of both appendages and uterus. But this had the disadvantage of bringing about a premature climacterium and within the last few years there has been a marked change in our attitude and it is to be anticipated that the conservative methods, among them the Brandt treatment, will be rehabilitated. There are extensive statistics on record by Peham and Keitler of Chrobak's clinic, in Vienna, which show that in one-sixth of the cases of chronic inflammations, treated conservatively, preg-

nancy had occurred. This should teach the surgeon to be less radical and less hasty to operate. As to technique, this massage treatment was entirely different from massage used anywhere else on the body. It did not consist in going into the vagina with one or two fingers of one hand and rubbing somewhere on the outside with the other hand. With the proper method the erotic side need not be considered. An indispensable premise is a proper diagnosis. One should be absolutely sure of the conditions he is to attack. If one did not succeed in making such a diagnosis at the first examination, let him repeat it, if necessary under an anesthetic. Many operations were done where results could be accomplished with less radical methods. It is true the Alexander operation is not a dangerous one, yet it subjects the patient to the risk connected with any operation, to a great deal of anxiety and expense, and the results are not always satisfactory. There are recurrences and complications. As an example Dr. Gellhorn cited the case of a patient under his care who expected her delivery in a month or two. This patient had been operated upon by a surgeon of great ability who did an Alexander operation, as a result of which she has an inguinal hernia on the right side. It might be that one special method of doing this operation gives better results than the others, but there are so many modifications of the operation that the inference is permissible that

none of these operations is ideal, otherwise there would be but one Alexander operation. The speaker operates as a rule only in cases of fixed retroflexion, where pessary treatment is unsuccessful. He does not believe that any case of fixed retroflexion can be cured by massage. Perhaps a few cases with very thin and very few adhesions might be relieved, but in those cases where the adhesions are dense, interference, save of an operative nature, is useless. There is room for Brandt's method in our therapeutic efforts, provided the cases are properly selected by means of an accurate diagnosis and provided this treatment is given in the way which Thure Brandt was the first to teach us.

Dr. Charles Shattinger said that in listening to the controversy between Dr. Ross and Dr. Kieffer it had occurred to him that possibly there was some ground for a reconciliation. Take for example the cervical laceration as a possible entry for infection and the resulting infiltration from that infection. It seemed only reasonable to suppose that if the resulting infiltration had not passed too far, the repair of the wound coupled with the subsequent forces of nature would result in ultimate recovery, just as an enlarged lymph node in the axilla would disappear after the cure of a wounded finger. On the other hand, if one would massage the lymph node, the channels leading to it from the finger assisting thereby the finger's circulation, one could bring about

healing of the wound, and disappearance of the node. There were many roads to Rome. If the infiltration had proceeded beyond that of a mere exudate, the repair of the laceration alone would not remove the infiltration. Dr. Kieffer had said something about abscesses. Possibly Dr. Ross had not made it clear, but pelvic massage is held to be positively contraindicated in two conditions: cancer and pus. Dr. Gellhorn had stated that massage should be made toward the periphery. The directions are to massage toward the uterus. If one massaged toward the peritoneal end of the tubes one might drive their secretion into the peritoneum. The natural outlet of the tube was the uterus. In the enumeration of other methods of treatment, Dr. Gellhorn had said that last but not least was the application of heated air. He was sorry that Dr. Gellhorn had omitted one that was by great odds not the least in importance, viz., electricity. Nearly all of these measures seem to have the same effect that of producing reparative hyperaemia. It may be done by hot air, hot water, the high frequency or the galvanic current. Sometimes one method was more convenient than another. There was no miraculous virtue in electricity over hot air. They were simply two ways of reaching the same result. And in this same principle (improvement in the circulation) lay the value of massage. He was sorry that some remarks had

been made on the floor. One was that possibly some of Dr. Ross' patients had been cured by suggestion. That word was used over and over again and was usually the last resort of those who could not account for the manner in which a cure had been brought about. Granted that some of these patients may have gotten well by suggestion. If one wished to make a critical examination of the exact mode of action of a remedy then it might be well enough to inquire whether suggestion played any part in affecting a cure, but so far as the result was concerned it made no difference to the doctor or the patient what had brought it about. If a physician could cure a headache of eleven years' standing by suggestion, he should do it, that was very much better than to let the patient continue to have headache for eleven years longer. As to the necessity for a gymnasium, the Thure Brandt method did not necessarily mean the method exactly as the originator had practiced it. Thure Brandt was a gymnast teach-

er and no doubt used a gymnasium, but by the Thure Brandt method was now understood a certain number of procedures, a circular rubbing movement, lifting of the uterus and certain gymnastic movements of the thighs. If there were any exaggerated statements in Brandt's book it should be remembered that he was a layman. His treatment is not to be rejected on that account, but must stand or fall on its merits. However well founded in theory and however carefully studied in the laboratory, the crucial test of any treatment has always been and still is—the patient.

Dr. Ross, in closing, said that it was absolutely impossible to teach any one to do this massage without its being observed. The student must see it done by some one who knew how to do the work. However much he might study, it would be impossible to learn it otherwise. To say that this method would cause the death of a patient when properly performed could be due only to a lack of knowledge of the method.



## CERVICAL LACERATION.\*

By DAVIS FORSTER, M. D., St. Louis.

A recent discussion of a paper in the St. Louis Medical Society of Missouri led to the expression of opinions that were different as to effects and results of cervical lacerations, and of the advisability of repairing the same. Therefore, a review of the facts will not be out of place at this time, though the subject is an old one, and yet it might be well for us to go over well trodden ground again, lest we forget.

The first operation of hysterotrachelorrhaphy was performed by Thomas Addis Emmett, of New York and was named by Dudley, of Chicago. Emmett's operation followed upon the era of womb splitting inaugurated by his predecessors. The investigations of Emmett were of great value to the profession, as he first demonstrated by catching the denuded cervical lips with a hook and bringing them together, that there was a laceration present and not an erosion. Previous to that event the everted surfaces of the cervix had been treated as a pathological entity, cicatricial ectropion. Emmett's operation demonstrated itself of so marked benefit to the patient that it became a fad, and like all fads, was probably over-worked. The operation, however, was founded on firm surgical grounds and the technique of Emmett was so per-

fect that we use the same with but little alteration to this day.

Cervical laceration is caused nearly always by the passage of the fetus through the cervical canal, sometimes by the rapid dilatation due to curettage. The laceration may be unolateral, bilateral or stellate, is more often on the left side, because the occiput impinges on that side more frequently causing greater distention. We cannot wonder at the frequency with which a tear takes place when we remember that canal normally one-eighth of an inch in diameter has to dilate to allow the passage of a body with a diameter of more than four inches.

The uterus is a muscular body with longitudinal and circular fibers. It weighs after being emptied at term about two pounds. When the cervix is torn the point of insertion of the longitudinal muscle fibers is interrupted and their contractibility is interfered with. The uterus is unable to involute to its normal size. The organ becomes flabby, loose, boggy, infiltrated with serum. The mucous membrane is congested and menstrual flow exaggerated and deranged. Through loss of tone the uterus bends at the junction of the cervix and body. The cervix, with lips everted by muscular contraction, is forced down on the floor of the vagina by the overweight of the organ and by pressure the lips are further

\*Read before the St. Louis Medical Society, December 2, 1905.

separated. Lined with columnar, ciliated epithelium, with glands secreting an alkaline mucus, it is forced to remain in the acid secretions of the vagina constantly irritated by them. The glands of Naboth become closed and form cysts which in time riddle the cervix with a cystic degeneration.

The uterus swinging normally in its peritoneal hammock, becomes overweighted and drops backward and further pressed by intra-abdominal force, swings in the arc until the fundus passes the promontory of the sacrum.

Again, the lacerated cervix serves as an open door through which infection may creep in by continuity of mucosa through nature's mechanical gateway, the external os, or through the lymphatics with which the uterus is so rich. Invasion by continuity of mucosa is, broadly speaking, by the gonococcus of Neisser, with subsequent involvement of endometrium, Fallopian tubes and peritoneum. While invasion through the lymphatics is more often of septic origin, the staphylococcus and streptococcus pyogenes. This invasion of foreign media of irritation takes place whether the tear be sufficient to involve the cellular tissue surrounding the uterus, or if it be confined within the area of the canal itself. Granted the bacterial invasion of the organ followed by nature's effort to limit the area of infection by hurrying to the parts a leucocyte army to build a plastic

wall, we have the cardinal symptoms of pain, heat, redness, swelling and increased secretion, in short inflammation resulting, and the retroverted uterus is bound by plasma exudations in its unnatural position, where it lies with twisted vessels adding to its congestion.

This infection with its consequent inflammation may not take place for a variable time following the laceration and subincolution and is in no sense to be considered as a cause of the subinvolution. This subinvolution extends not only to the uterus but to the round ligaments, the tubes and surrounding tissues.

As regards prophylaxis, we should abstain from applying forceps until the cervix is fully dilated, should not give ergot until the uterus is empty, should refrain from puncturing the amniotic sac, or from making pressure upon the abdomen when the child is in the uterus. Sometimes when the surfaces are approximated and kept clean these cervical tears will heal by primary union, if not subjected to muscular contraction, the tears on the anterior and the posterior portion of the uterus are not subjected to muscular contraction and nature attends to these so well that the gynecologist finds the chief place for his work on the lateral parts of the uterus, which are separated by muscular contraction. If unable to heal primarily nature attempts a secondary repair by granulation, but where the squamous epithelium of the vaginal por-

tion meets the columnar epithelium of the canal, a cicatricial plug is formed which prevents further return to the normal. This scar plug by pressure on nerve endings is responsible for a variable number of symptoms, which are relieved by the removal of scar tissue. Among these may be numbered persistent headache and backache and intractable vomiting.

In repair of the cervix the patient is put to bed the day before the operation, given a saline laxative the night before and an enema the morning of the operation. Bichloride douche 1-2000. Vulva is shaved and covered with an antiseptic wet pack. Patient is brought to operating room where under general anesthesia the vagina and cervix are washed with green soap and bichloride solution 1-2000. Patient is in the lithotomy position with the perineum retracted with a Jackson or Edebohl speculum. Each lip or cervix is caught with a tenaculum forcep which gives control of the uterus. Area to be denuded is outlined with scalpel and tissue removed with scissors. Care must be taken to remove all scar tissue for scar tissue in the wound would prevent some of the good results looked for from the operation. A suture of No. 3 ten-day chromicized catgut is passed from vaginal surface of lip to the cervical canal and back through the other lip. About three sutures on each side are used to approximate as needed. Having not denuded the channel of

the canal, we see that it is able to admit a sound but do not pack it with gauze. Keep vagina clean with douche twice daily and let the patient up on the tenth day.

The results are more satisfactory in proportion to the severity of this operation than any which the gynecologist is called upon to perform. Following the operation the first menstruation will nearly approach a hemorrhage, demonstrating the returning contractibility of the uterus, its reduction in size and its return to normal condition.

5249 Raymond Av.

#### DISCUSSION.

Dr. W. B. Dorsett complimented the essayist on the description of the pathology. It was very pretty and very true. He was pleased to see that the essayist had described the operation as first described by Emmett and verified the assertion that but few improvements had been made in that operation. Dr. Dorsett had seen this operation performed by surgeons and criticised the method used for drawing together the denuded surfaces. He illustrated on the blackboard Skeen's method of marking out the cervical canal. One would find that when he began to denude, the canal would stand up in proportion to the depth of the incision. He illustrated the method of applying the ligatures and showed that this method would not bring in apposition all the raw surfaces of the edges of the wound. He



insisted that the ligatures should be introduced from the side and not over the end of the cervix uteri. He showed how, if introduced and tied over the end of the cervix, an additional os may be formed in the deep angle of the denuded surface. Dr. Dorsett then illustrated the method which he used and added that the straight Emmett needle should be used, otherwise one would not get a uniform depth of puncture. He does not begin to tie the sutures until all have been inserted on both sides; then the first suture was tied in the angle of the wound on one side and then the corresponding one on the opposite side, and so on alternately till the denuded surfaces were well brought in apposition. In performing a trachelorrhaphy, he never did one without a curettement. When there were erosions, there was the same pathological condition in the endometrium as the one found in the cervix, and to get the best results the uterus should be cleaned out first. If not cleaned out, these pathogenic organisms would come down on the fresh surface. As to drainage, after cleaning out the uterus there would always be little shreds left and for this reason it was best to put in a candle wick gauze drain. When necessary to use carbolic acid or drugs of that character, he never applied them when he did a trachelorrhaphy, for it would trickle down into the wound and would interfere with union. He preferred a number two 20-day catgut instead

of the so-called ten-day catgut. The ten-day catgut did not always last ten days. In doing the combined operation of curettement, trachelorrhaphy, and perineorrhaphy catgut was much to be preferred to silkworm gut, thus obviating the necessity for taking out the sutures. He wished to say once more that the pathology as given by the essayist was excellent and as clearly stated as he had ever heard it.

Dr. Robert Barclay asked Dr. Dorsett, whether, after having placed all the sutures in position for tying and after having tied the first one, he tied the corresponding one on the opposite side before tying the one next on the same side, with each suture; and, if not, why not?

Dr. Dorsett, replying to Dr. Barclay, said he did not think it made any difference; he had done both and each was equally satisfactory.

Dr. Robert Funkhouser stated that one thing had not been mentioned in connection with this operation, which perhaps might be inferred either directly or incidentally, and it was in connection with the trouble now confronting the medical profession—cancer of the uterus. For that reason every tear, however slight, should be repaired and the sooner the better. A great deal had been done in the way of attempt to cure the disease by radical operations after it had appeared. To be successful in the treatment of cancer of the uterus prophylactic methods must be used, and there was no bet-

ter method than sewing up these tears. As a rule it was too late to operate after the development of cancer of the neck of the uterus. The thing to do was to anticipate the disease, for the vast majority of cases of cancer of the cervix occurred in women who had borne children. As to sutures, he had tried catgut, silkworm gut, silk, and had begun with silver wire, and he preferred silkworm gut and a perforated button, thus the objection of Dr. Dorsett, of the pulling apart of the lips of the wound, did not obtain for one could graduate the tension so that there would be no puckering. He used a machine needle, with the eye at the point. One could put the needle through threaded or thread it afterwards. He had found by this method that he could place the needle more satisfactorily to himself. There were cases, however, that tested the patience of the operator, those cases that could not be pulled down, where there were adhesions. He did not agree with Dr. Dorsett as to the use of applications to the uterus after curettement. In every case operated upon he never failed to swab out the uterus with iodine and he did not recall a single case where the flaps had failed to unite. When a sound could be put in immediately after the operation and the canal was found open, there would not be much trouble about drainage. There might be some pain in the first twenty-four hours. It was a perfectly justifiable operation to perform a curette-

ment, a trachelorrhaphy, and a perineorrhaphy. When he had first done this operation he placed the patient upon the side but he had later adopted the method of placing her on the back, and using no speculum.

Dr. A. R. Kieffer commended the paper and said he was also glad to hear the views of Dr. Dorsett and Dr. Funkhouser, whom he did not often see operate. He differed considerably from Dr. Dorsett as to his technique. If Emmett placed the sutures as Dr. Dorsett had described, then Emmett did not understand the simplest method of placing the sutures.

The necessity for repair of the cervix existed every time the cervix was torn, no matter how frequently children might be borne. The first consequence of such a tear was hemorrhage, next increased danger of infection during the puerperium, next was subinvolution of uterus and pelvic organs generally, and, finally, adhesions and displacement, and if the tear was deep and unilateral, the uterus might be found pulled to one side with perhaps an ovary caught beneath it, and the woman in constant pain at every movement or jolt of the body. One reason this operation was neglected was that in this day of asepsis and antisepsis, even the young operator disdained to do anything less than a major operation. Trachelorrhaphy is a minor operation. The woman suffered from it little or none and far as he was concerned, Dr. Kieffer added that she might eat a square meal

within fifteen minutes if she so desired. The sutures should rarely be left in situ more than eight days. He did not think catgut was to be relied upon, for as Dr. Dorsett had said, ten-day catgut might be in reality six-day catgut, while twenty-day catgut might last six months. The silkworm gut sutures were so easily removed that it could not be considered an objection to them. The sutures should be taken out as soon as there was no necessity for them. With patient in classic lithotomy position and posterior-retractor in place, the first point to be considered was the location of the canal. After that each lip should be caught with a double tenacula forcep opposite future external os. Montgomery's advice was that before denuding one should cut through the scar tissue in the angle on one side and then on the opposite side, thus showing just how much scar tissue would have to be cut through. The knife gave a surface that would heal better than that made by the scissors. One should get all the scar tissue as the aim was to get a normal cervix. It was presumed that one left an undenuded strip but there was usually so much cystic degeneration that it was impossible to leave this strip in all cases on both labia. After denuding the two forceps should be grasped (in one hand) and held in (such) position that the margins of denuded areas are carefully coapted. Then a curved needle loaded with black silkworm gut should be employed. The first suture

should be placed far enough back so that a second os could not be left there, then another placed just in front of that but not so transversely. After getting them all in place the labia should be separated and all clots washed out, then the back suture tied, then the others on the same side, and finally those on the opposite side. Cut them long. A string gauze drain should always be put in. This should not be left in too long. He had had one case in which trouble resulted from failure to remove drain the second day. He made it a rule to leave the drain in one or two days. There was no reason for the use of catgut unless one repaired the perineum at the same time. He did not often do a curettage prior to operation. Remove the cause by repairing the tear and the condition would get well of itself. By not doing a curettage the discharge coming down during the healing process was avoided. As to the nerve symptoms so often referred to, he did not believe in their existence to the extent usually mentioned in text books. Such symptoms as did exist depended upon the condition of the pelvis rather than upon the scar tissue. Nothing that he did in a surgical way gave more satisfaction for the amount of work done than repair of the cervix, and whenever the patient would consent he did it under local anesthesia.

Dr. L. H. Laidley summed up the discussion by saying that, first, Emmett had taught all it was necessary to know as to the condition and its



repair. He first indicated the needle that should be used. He also gave the method of introducing the sutures and as to the material used, it had been first silver wire, then catgut and silkworm gut. As to results, he was sure he got no better results from any surgical operation than he did from this procedure. This operation was as necessary as to repair the perineum. As to curettement, a few cases required it, but not all of them. The use of tincture of iodine after operation was certainly good practice, but he had never seen any necessity for the use of drainage.

Dr. C. C. Morris thought there was practically no difference of opinion as to the necessity for this operation, or as to the methods of performing it. The seeming difference expressed by the previous speakers was simply in the method that they had practiced to their satisfaction. There was something in all with which he agreed and something with which he disagreed. He agreed with Dr. Dorsett on the catgut suture, the curettage and the drainage. He almost invariably did a curettement and used a wick drain, removing it within twenty-four hours. He had used chromicized catgut for fifteen years and had never had occasion to regret it. No. 2 or No. 3 had proved equally satisfactory. The advantage in the use of catgut was that the sutures did not have to be removed, and so many of these cases of lacerated cervix were accompanied by a lacerated perineum. In this way

one was not compelled to interfere with the perineal sutures in order to remove the sutures from the cervix. As to doing this operation primarily, in the home of the patient he had never attempted it and in the present status of obstetrics one did not often have these patients in the hospital. He had operated primarily upon two patients in the hospital, both primipara and both were delivered upon the operating table. The cervix was immediately repaired (with catgut) and followed by bi-chloride douches twice daily. At the end of the puerperium no one could have told that there had been a laceration of the cervix, although in one case even the uterine artery had been torn.

Dr. Kieffer said that everybody who had much experience with the operation would recall that in some cases there was alarming hemorrhage. One patient he had operated upon in the forenoon was visited in the afternoon and found to have had a severe hemorrhage. She ultimately made a good recovery. In another case, a week after the operation the bleeding began and he had to work with her the greater part of one night before being able to control the hemorrhage. Yet there was no history of this woman being a "bleeder" before that. In another case he believed he had really repaired a congenital fissure. The patient was jaundiced, the tear was in the median line, extending up behind the bladder and the edges of the wound were perfectly smooth. This pa-

tient had attacks of hemorrhages for two weeks.

Dr. Dorsett said that in describing the operation he had not attempted to go into minutia or to isolate certain cases. He used the tenaculum only to get hold of the uterus; he then used the curved needle, passing it through the anterior lip with No. 6 or No. 7 silk thread, and one through the posterior lip also. Tying a knot in each of these he could hold the uterus in any position desired without the aid of the tenaculum. In this way it was possible to pull down the uterus in case it was desired to introduce a sound. Again by the use of these anchor threads an additional surgical instrument in the vagina is done away with. It was a good idea to leave these threads and if it was found necessary, several days afterward, to take hold of the uterus for an examination as to its condition, these threads could be used thus obviating the use of the tenaculum which would injure the mucous membrane. By this means also the uterus could be held in position in case it should be necessary to steady it in the introduction of an intra-uterine douche tube. The threads could be left in until the case was ready to be discharged when one strand of the doubled thread could be cut with scissors and the anchor removed.

Dr. Forster, in closing, said he thought they were all on the same ground as to the method of doing this operation. He did not make it

a rule to curette unless there was some indication for it. If there was a septic condition, occurring through the lymphatics, it did not necessarily follow that the mucous membrane was involved, and if not there would be little result from the curettement, while if it was a gonorrhoeal infection the curettement might be the means of spreading the infection. Once in a while, however, it was necessary to curette the uterus, and afterward he liked to pass a cervical speculum to protect adjacent tissues and wipe out the uterus with carbolic acid and then with pure alcohol. He regretted having left out any reference to cancer, for that was one of his special hobbies. Manifestly, attention should be called to that at all times. The records of the Women's Hospital of New York (Emmett's old hospital), showed that there had never been a true case of cervical cancer which came to operation in which the patient had remained alive for more than three years. In looking up the matter Dr. Forster had been unable to find a single case on record in New York that had lived more than three years. Those cases which did recover were looked upon as hyperplasias. He was glad Dr. Funkhouser had called attention to cervical cancer. With very few exceptions it had been demonstrated that laceration of the cervix had been present, and in those cases where the women had not borne children there had usually been performed a dilatation of the cervix.

As to primary operation, he made it a routine practice ten days after normal labor to examine the patient in a clear light to see if any laceration of the cervix had occurred. He did not believe it practical to do a primary operation immediately after labor for the uterus had not then re-

turned sufficiently to its normal condition. If he found a laceration when he made this examination (about the tenth day), he scraped the torn edge with a knife just enough to denude and then united the edges with a catgut suture.

## MAN AND HIS ECONOMIC RELATION TO THE EARTH.\*

By GEORGE HOMAN, M. D., St. Louis.

In the course of a recent discussion before the St. Louis Medical Society on the subject of laws relating to criminal abortion, the extent to which that evil now obtains, and the difficulties attending the enforcement of the legal penalties provided against those offending therein, an instance was cited in which a married couple—both persons being of more than usual intelligence—had agreed in the commission of this act, the husband himself performing the operation although possessing no medical education—he having obtained from books (in a public library) the requisite knowledge as to method of procedure, instruments required, etc.; and this unsolicited disclosure together with other particulars furnished, served as a flash light to make plain certain social conditions and their efficient causes to the writer hereof.

The cause that prompted this un-

natural crime was found to lie in want or the fear of want—a lack of bread for children already born to them—and thus differed in its complexion from instances of like action committed as a result of profligacy, or the possible disclosure of illegitimacy, or the unwillingness shown by many women comfortably circumstanced to accept the full responsibilities of the marital state. Obviously, just what the proportions are of these several classes can only be conjectured, the reasons for silence and secrecy being usually controlling if not imperative so that accurate statistics are not attainable even from private medical sources.

But even with the exclusion of that share of the problem chargeable to licentiousness or illicit relation, and the part due to folly or fashion in married life, there must yet remain a considerable proportion caused by the stress of economic hardship bearing cruelly on married people naturally honest and wishing to do

\*Read before the St. Louis Medical Society, December 9, 1905.



right but who, affrighted by the specter of the wolf at the door, feel compelled to a course most perilous and morally unjustifiable—as was the case of the man and woman just instanced—and it is this phase of the question only, and the related phenomena, to which consideration is now invited. And if, from a searching scrutiny of the deep-lying causes and actuating motives, it shall appear that the effect of present law is to force well-intending people into crime then instead of urging the infliction of legal penalties upon the victims of social maladjustments and economic wrong it is suggested that the true course of the medical profession would be to demand the repeal of every such law, and the confirmation of the statutes to natural right and fundamental justice: and such a demand can come with more impressive force from our profession than from any other, for as has been said the clergyman sees the good side of mankind, the lawyer the bad side, but the physician sees the weak side—sees humanity with the masks and disguises that convention or craft may dictate or find necessary to put aside, and the secrets of life laid bare to the medical eye and ear.

Stated in its simplest terms, man's whole endeavor is to gain his daily bread—not weekly bread or monthly bread but bread day by day—for it has been shown by acceptable authority that the margin between food-sufficiency and starvation taken the

world over is less than seven days, and that if the channels of trade should be blocked or the instruments of commerce seriously hindered in operation, if the seasons generally should change or the harvests fail the pangs of hunger would be felt at once by that considerable part of the people ever near to want in every civilized land, and thence extending until famine became a feature involving entire populations, the dwellers in cities bearing the weight of the affliction which commonly is tempered by the dole of charity.

Such an affliction, even in modified form and however produced, must vitally influence population progress in respect of health, reproduction, and longevity, and if it be found that such occurrences are needless and simply the mischievous outcome of human error in the placing of wrongful burdens on industry, in lessening the wage of toilers, in making harder the lot of all workers, in clouding with uncertainty of livelihood the future of families, in producing side by side monstrous examples of undeserved poverty and unearned wealth, in driving or tempting to crimes against life, health, morals or property the weak, the unfortunate, the despairing, or the unemployed, then a valid indictment must lie against the framers and supporters of society so constituted, and a full share of the guilt of such offending must rightly be laid at their doors.

Professional talkers on race suicide have darkened counsel with

many words but all have been conveniently blind to the tremendous force of economic causes that compel to this crime—causes that operate as silently and surely as gravitation—they blink the fact that the struggle for existence is becoming more intense, that the cost of living to the average family is rising every year without a proportionate increase of the family income,<sup>1</sup> and even preachers and teachers should know that in morals as well as mechanics it is a truism that there is a point where the breaking strain is reached, where human nature gives way under the stress of circumstances that seem irresistible, and yields in a struggle against odds that appear overwhelming, be the consequences what they may, and howsoever such nature may have been fortified by religious faith, moral practice, or prudent counsel.

Man in his economic relation to the earth is simply a land animal; his physical frame is formed from earthly elements, his food, shelter and raiment come from the same source, and at the end of life he mingles with the dust from which he came. Such being the case the manner of his living, the exercise of his powers, the employment of his faculties must of necessity be shaped and conditioned by his earthly surroundings and circumstances.

In the simple conditions of primitive life these relations were easily understood and were voiced by the Iroquois chieftain when he said,

“The sun is my father, the earth is my mother—I will rest on her bosom.” But as society progressed its organization became more complex, communities and cities arose; and man as an individual was brought in close living and working contact with many thousands of his fellows, and all the powers of invention and the resources of skill, art, and science are now taxed to supply his needs and minister to his comforts. But notwithstanding the change in appearances he is no less a land animal than before, although separated to a certain extent from nature, as that word is commonly used, but this separation is not one necessarily entailing hardship in any form provided the laws governing society are modified to meet the changed conditions of that society.

For example, in primitive usage the law of property was expressed in the words *Mine* and *Thine*—that which a man earned or held honest title to was his against all comers, and the same rule applied to his neighbor—all the products of industry, every form in which wealth appeared, was subject to this rule of division, the law recognizing its fairness and confirming its equity—any unauthorized invasion of such property right being adjudged robbery and punishable accordingly.

As more settlements grow into communities and cities a form of wealth appeared unknown before and which no individual or partnership of persons produced but which

was created in consequence of the presence and activities of every member of the community that could render a service or had a want to be supplied. This fund appears as a result of natural law to meet common social needs in a manner analogous to the provision of milk in mammals for the sustenance of their offspring; and, tested by the law of primitive justice before mentioned, it belongs to all by reason of having been produced by all, and rightfully can be applied only to the common purposes of the community that created it—in short it is neither *Minor Thine* but *Ours* being the common product of the social life. It is moreover the unfailing index and measure of such life, mounting with municipal growth, being largest where the need is greatest, and vanishing to nothingness when cities die. This fund, or ground rent, in capitalized form reaches to fabulous sums in the great centers of population, a piece of ground in New York having been recently sold at the rate of about \$28,000,000.00 per acre while in London some few years ago a few feet sold at the rate of nearly \$67,000,000.00 per acre.

Nearly all of the vast revenues drawn from this source is now diverted into private hands instead of being applied to meet public needs, thus throwing the heavy weight of taxation upon thrift and industry—showing that human law has not kept pace with social and economic development, and through such fail-

ure or oversight affording to government a pretext to wrongfully invade the property rights of the individual and by arbitrary process take from him that to which his title is perfect; those who are least able to pay being burdened most, and the gross effect of the system being to foster concealment, deception, falsity, lying and perjury in all property returns.

If attempts of this kind were abandoned till things produced by human labor and universally needed were freed of taxation, the gain in public morals alone would be marked; but the economic benefits would be still greater, for the demand for such products would be enormously increased with a corresponding call for additional labor to meet this demand.

The accepted rule of judgment in human affairs is that by their fruits ye shall know them, and thus measured our civilization is not a success in the ordaining of justice between man and man. If the power to tax is the power to destroy then the power to untax must be the power to save, and legislation must make speed to bring about just economic relations between those whose right to the use of the earth rests on the simple and sufficient fact that they have been born and are here.

The expressions, natural right and fundamental justice, have already been emphasized in this connection, the definition of the first being that



such right entitles the worker to his full earnings undiminished by private robbery or governmental levy, while fundamental justice not only recognizes this right as pertaining to the individual but extends the principle and awards to the city or community for public purposes that fund in ground rent accruing by reason of its own growth and activities.

The possibilities connected with the recognition of monopoly rights in the earth under present law are shown by the fact that visitors from other spheres descending to earth become the property of the owner of the land on which they fall; meteorites, fragments of other worlds, have thus become private property, and the messenger from Mars may meet the same fate unless Martian might or diplomacy shall prevail over terrestrial law.

In further illustration of such possibilities, and in immediate connection with the economic relation of man to the earth, let it be supposed that in some great center of our civilization all the usual sources of food supply were cut off, and that the miracle told in Hebrew chronicles of the fall of manna from heaven shall be repeated. As probably not more than three out of every ten persons living in large cities own their homes, and as the owners of the land could legally lay claim to all the manna that fell thereon, can imagination conceive the wolfish struggle for food that would instantly begin in every street and

other public place—the scenes of brutality and bloodshed that would mark the coming of this bounty from on high! And yet in the face of such a possibility prayers are offered in the churches for the relief of destitution and human wretchedness addressed to the Almighty God, when it may be plainly seen that as conditions now are Omnipotence itself is powerless to bring about a change in this respect.

Arguments or pleas such as the foregoing and resting on merely abstract justice or isolated principle have very little weight with many minds, and carry no convincing force—only appeals to precedent, to the record of what has been done in other ages and places can make an impression upon them. For the purposes of this argument it is fortunate that this mental peculiarity exists as the demand can be met and an example cited that marks an epoch in human history—a period that has constituted a beacon light in the intellectual progress of the race.

This period, which lasted about one hundred and fifty years, developed more than twenty-four centuries ago and the place was the city of classic Athens. The Athenian population probably did not amount to one-fourth of that which St. Louis now has, but Galton and Symonds agree in the opinion that the intellectual level of its people was perhaps as superior to ours as our race is to that of the Australian savage.<sup>2</sup> Chattel slavery, however, was every-

where known in that age, and was a feature of the civic life of Athens, but no slave or alien shared in the exercise of citizenship.

Taxation was unknown or if any levy was made it fell only on the rich. Poverty as we know it did not exist for the revenues drawn from all those sources which today would be termed public utilities, franchises, monopolies, privileges, etc., went to meet civic needs. Mines, markets, fields, forests, wharves and the like were operated for the public benefit with the result that want and the fear of want was not known, for a comfortable living was assured to anyone who would work in whatever line was most congenial to his taste. As a consequence the sordid passions of avarice, greed, selfishness, were weakened at their sources, and the people turned their minds to intellectual pursuits with results unmatched before and unequalled since—producing a marvelous array of names familiar to scholars of all later time, and known for centuries even to the school children of every civilized nation.

It is not an uncommon event in the annals of different peoples for the name of some remarkable man to shine out in solitary brilliancy, but during the period in question there appeared in the firmament of thought a blazing constellation of geniuses of the first magnitude, covering the whole range of human knowledge, exercising every faculty of the mind and making an impression on the in-

tellectual life of the world so lasting that its like has never since been approached; and even the human form at that time reached proportions so perfect in symmetry and strength that the classic Grecian model remains unequalled to this day.

In philosophy, natural science, oratory, statesmanship, architecture, sculpture, painting, history, poetry the tragic and satiric drama, etc., the names of Socrates, Plato, Aristotle, Demosthenes, Eschines, Lycurgus, Phidias, Pericles, Praxiteles, Xenophon, Thucydides, Euripides, Eschylus, Sophocles, and Aristophanes shine preeminent in this immortal galaxy in which, however many other illustrious names might be included.

It may be urged that causes other than the one cited produced this remarkable result but this development took place only during the comparatively short time mentioned, while the history of Athens as a city covers upwards of three thousand years with no previous or subsequent manifestation of the kind. Furthermore the Grecian colonies and settlements found in many places throughout the length of the Mediterranean and Black seas yielded no such fruitage, while the sky, the sea, the soil, and the air of Greece are today about the same as they were during the Golden Age of Pericles.<sup>3</sup>

Such being the case the conclusion seems inevitable that this wise local adjustment in man's economic relation to the earth effected through

the operation of law and not known elsewhere, was the potent determining factor in the results; and if, in such a space of time and notwithstanding the existence of human slavery, such a development was possible within the narrow compass of a single small state—a city that was continually threatened by jealous neighbors and often attacked by powerful enemies, by whom her final overthrow was wrought—what limit could be set to the glorious possibilities if the people of this nation should be brought to a sense of this fundamental justice in the ordering of man's relation to the element on which and from which he must live! It would in fact usher in the reign of peace on earth to men of good will, when those who will to do good would find the way made easy, no law to drive them to evil doing; when the expectation of human life either born or unborn would no longer hinge directly or indirectly on doubt of a livelihood for anyone willing to work—a time when the shocking spectacles and occurrences daily afforded by a civilization gone wrong through a false economic system would no more be seen, and a Golden Age resting on mankind's physical, moral and intellectual excellence and health would again appear; and no worthier purpose than this can claim the support of the medical profession—a profession that must count nothing that is human as being foreign to itself.

## NOTES.

1. Dun's Review for October, 1905, says that the cost of all the necessities of life is steadily rising, and the prices are now higher than they have been any time during the last twenty-five years.

The Springfield *Republican*, Nov. 20, 1905, in "Prosperity and Prices," says:

"There has been a marked advance in the average prices of food products within a month and \* \* \* for commodities in general the advance from last year has been heavy \* \* \*. For the consumer who is not closely identified with the profits of production, it is a prosperity which is being borne with increasing difficulty. Wages are higher, but their purchasing power is much lower. Salaries and fixed incomes are generally improved, but their command of the necessities and comforts of life has greatly declined. \* \* \* For the great mass of the people, who are regularly employed in bad as well as good times, and regularly in receipt of wages and salaries and incomes, the situation is a trying one, and increasing difficulty is faced in making both ends meet. Upon these classes of people there is being forced the necessity of practicing the closest economy."

2. Says Dr. Francis Galton, of the highest authority in anthropological science, "A population of ninety thousand produced two men, Socrates and Plato, whom the whole population of Europe [elsewhere] has never equaled, and fourteen men of an ability of which the Anglo-Saxon race has only produced, in two thousand years, five equals." He asserts that the average ability of the Athenian race was about as much above that of the English race as that race is above the African Negro.

Bliss, *The Outlook* 81, 11.

3. "We are happy in a form of government which \* \* \* is original at Athens. And this our form, as committed not to the few, but to the whole body of the people, is called a democracy. How different so ever in a private capacity, we all enjoy the same general equality our laws are fitted to preserve; and superior honors just as we excel. The public administration \* \* \*, is attainable only by merit. Poverty is not a hindrance since whoever is able to serve his country, meets with no obstacle to preferment from his first obscurity. The offices of the state we go through without obstruction from one another; \* \* \* not angry with a neighbor for following



the bent of his own humor, nor putting on the countenance of discontent, which pains though it can not punish—so that in private life we converse without diffidence or damage, whilst we dare not on any account offend against the public, through the reverence we bear to the magistrates and the laws, chiefly to those enacted for the redress of the injured, and to those unwritten, a branch of which is allowed disgrace" \* \* \*

"In our manner of living \* \* \* we cultivate philosophy without enervating the mind. We display our wealth in the season of beneficence, and not in the vanity of discourse. A confession of poverty is disgrace to no man, no effort to avoid it is disgrace indeed. There is visible in the same persons an attention to their own private concerns and those of the public; and in others engaged in the labors of life, there is a competent skill in the affairs of government. For we are the only people who think him that does not meddle in state affairs—not indolent, but good for nothing. And yet we pass the soundest judgments, and are quick at catching the right apprehensions of things \* \* \*. Herein consists our distinguishing excellence, that in the hour of action we show the greatest courage, and yet debate beforehand the expediency of our measures.

\* \* \* "I shall sum up what yet remains by only adding—that our Athens in general is the school of Greece \* \*

\* "That I have not on this occasion made use of a pomp of words, but the truth of facts, that height to which by such a conduct this state has risen, is an undeniable proof. For we are now the only people of the world who are found by experience to be greater than report. \* \* \* That we deserve our power, we need no evidence to manifest. We have great and signal proofs of this, which entitle us to the admiration of present and future ages \* \* \*. In the just defence of such a state these victims \* \* \* have valiantly fought and bravely died. And every one of those who survive is ready, I am persuaded, to sacrifice life in such a cause."

From funeral oration of Pericles—Thucydides, Book II, (Smith's translation).

. Authorities and sources of information consulted:

United States Census Reports. Boeckh, Public Economy of Athens. Draper, Intellectual Development of Europe. Spencer, Social Statics. Xenophon Works

(Schmitz' translation). Ring, Problem of the Unemployed. Mahaffy, Social Life in Greece.

#### DISCUSSION.

Dr. Barclay, speaking of the comparison of our civilization with that of Athens, said he was sorry that this one had been selected. For instance, Athens had no hospitals for the sick, no hospitals for the insane, nor any of the humane institutions so common to Christian civilization today. Greed and selfishness were rampant then as now. Slavery prevailed then, and openly. He was amazed, too, that Dr. Homan should have included in his list of admirable men, Aristophanes. If there was any one thing, that more than all others, tended to bring about the execution of Socrates, it was the morbid influence of Aristophanes. He it was, who held up to ridicule this great benefactor of his own and subsequent generations, and did so much to bring about this good man's death.

As to the abolition of private ownership of anything, however, desirable, there were many difficulties in the way. No laws sufficed to deter the people from action who wanted to do certain things. A prevailing spirit of loving kindness as expressed in the word *humanitas* was the only thing that would ever bring about general amelioration of inhumane conditions. There were difficulties insuperable, or that seemed so at the present time, as to the method of putting summarily into effect any measure looking to the creation of a condition of affairs

such as Dr. Homan had advocated. When the strong grew tired of a thing and wanted it stopped, it would be stopped; but all human laws were a concession by the strong, and represented human power. Aggregations of capital had increased the value of human labor. All men were not provident. Man brought nothing into this world and it was sure he could carry nothing out of it. Aggregations of capital were made possible by the secure tenure of land but impossible under other

conditions. One man's right ceased where another's began. People by their self-denial accumulated property, the unconsumed product. Capital represented self-denial, and there must be some place reasonably secure where people could safely invest their capital. Dr. Barclay added that while he felt incompetent to discuss the subject of public ownership of all land, he was satisfied that we in these days of Christianity, do not care to return to Athenian civilization.

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## WHEN IS A PATENT MEDICINE NOT A PATENT MEDICINE.\*

By F. R. CORNWALL, S. Louis, Mo.

I have been requested to assist in the solution of the vexatious problem "When is a patent medicine not a patent medicine?" This problem is undoubtedly vexatious, not because it is new, but because it is out of the ordinary, and anything which is out of the ordinary is unfamiliar. It is the difficulty which a lawyer would experience if he were asked to give the meaning of Diethylsulfonmethylethys-methane, or Diethylsulfondimethyl-methane, or Acetyl-paraphenetidine, when perhaps you gentlemen would immediately say Trional for the first, Sulfonal for the second, and Phenacetin for the third.

The question at issue involves the difference between patent medicines and proprietary medicines, and

might be said to be a mixed question of law and medicine—not that law and medicine mix well together, because they make a horrible dose and there is a great difference between the two; for instance, when taken separately, you administer a dose to a patient, the patient is ignorant of the contents and happy in his ignorance. When a lawyer administers a dose to a client, it not only has to be labeled, but the knowledge conveyed frequently brings unhappiness. There is likewise a difference in the fees of each, in favor of the physician, I believe.

Now with reference to the difference between patent and proprietary medicines, it is suggested that in its simplest form it relates to the nature of the property right. In the instance of patent medicines, the

\*Read before the St. Louis Medical Society, December 9, 1905.

property right exists with relation to the article itself, and has nothing to do with the name. With relation to proprietary medicines, the property right exists with relation to the name only, and has nothing to do with the article of which the name forms the handle. In the case of a patent medicine the right is created by Statute, while in the case of the proprietary right in the name, it exists by virtue of common law. It is the difference between the substance and the name of the substance. The term "patent medicine" has arisen from the fact that it has been the practice in the Patent Office heretofore to grant patents on any prescription which might be filed in connection with an application,—it was even not a requisite that the author of the prescription should be a physician. The advantages and virtues of the remedy were set forth, and in most cases, proved to be more imaginary than real. However, the inventor's name was enrolled along side those of Whitney, Morse, Edison and Bell, depending upon the alphabetical position of his initial, but which enrollment had nothing to do with the value of his contribution to the arts and sciences. It is perhaps within the memory of many present that patent medicines were more common ten or fifteen years ago than they are today; in fact, medicines were more common than the diseases they were accredited to cure.

According to our laws, a patent is granted for a term of seventeen

years and gives to the patentee or owner of the patent the exclusive right to make, use and sell his invention for that length of time, at the end of which the invention becomes public property. A patent, however, is supposed to be predicated upon an invention which is new and useful, and novelty and utility in the sense of the patent law means more than those words ordinarily convey as commonly employed; for instance, an invention to be new must produce a new result. In recent years the Patent Office has imposed conditions upon the granting of patents for medicinal preparations, and those conditions are that there must be some chemical or physical change undergone in the preparation of the medicine and which modifies, affects or changes the product, making it different from anything produced before. This probably accounts for the fact that today few patents are granted on medicinal products, and none on mere compounds or mixtures.

From the above it is quite apparent that the word "patent" as a descriptive term for medicines is a shortening up of the more proper term "patented" as applied to medicines. Under our law it is required that one having a patent shall mark his invention "patented" together with the date thereof, else he will not be entitled to the collection of damages on account of infringement without proof of personal notice of the patent to the defendant. The



law further provides that anyone falsely marking an article patented on which no patent has been obtained shall be subject to a fine of \$100.00 for each and every offense, one-half of which shall go to the informant. While it may be true that many medicinal preparations in extensive use today were at one time the subject of letters patent of the United States, it is also true that the patents on a number of these have expired. While it once would have been accurate and correct to regard these medicines as patented medicines or patent medicines, it is no longer strictly correct to call them patent or patented medicines, because the patents therefor have ceased to exist and are no longer in force or effect.

This leads up to the second branch of the proposition, to-wit, proprietary medicines, and in taking up this phase of the inquiry it might be well to remark that it is possible for a medicine once patented, and known as a patent medicine, to be called by some new and fanciful name, vesting in the person adopting such new and fanciful name the proprietary right to that name. For instance, after a patent has expired and the medicine forming the subject matter of the patent can be made by the public at large, the public, in addition to having the right to make the medicine, also has the right to call that medicine by the name under which it was sold, and by which it was known, during the life of its patent. Take Castoria, for instance,

—not because you are crying for it or because you need it, but for illustrative purposes only,—this was a patented medicine and today by being called a different name, which is new and fanciful, it is possible to vest in the person adopting such new and fanciful name a proprietary right to that name. It is no longer strictly accurate or true to speak of Castoria as a patent or patented medicine as the patent therefor has expired.

The history of Castoria is interesting. In 1868 Dr. Pitcher secured a patent on a laxative compound said to be a good substitute for castor oil. The word "Castoria" was nowhere mentioned in the patent. The patent expired in 1885, and through various assignments the title thereof at the time of expiration was vested in the Centaur Company. The Centaur Company brought suit against Heinsfurter and others to enjoin the use of the word "Castoria" as a trade mark for laxative compounds and complained that the defendant was advertising extensively that it was the only manufacturer of genuine Castoria, and intimating that all others, even the owners of the recently expired patent, were selling spurious compounds. Justice Brewer rendered the decision of the Court, which is reported in 84 Fed. Rep., 955, and held that when a patented article becomes known by a particular name, though an arbitrary one invented by the patentee, such as Castoria, such name becomes public

property on the expiration of the patent; and no trade mark right exists therein, or can be acquired by subsequent use. This decision followed that of the English Courts in the "linoleum" case where the same question was decided.

To imagine a situation which will be useful in answering the question forming the text, we will assume that John Smith, following the directions of the Castoria patent, made and sold on the market a laxative compound to which he had given the name Star or any other designation not geographical, descriptive or deceptive, but which would vest in John Smith a property right to the trade mark or name he had adopted for this laxative compound. By judicious advertising a large business might be built up in Star Laxative. Star Laxative is a proprietary medicine. The public at large has the right to make Castoria which is the same as Star Laxative; the public at large has the right to make this laxative compound and sell it under its name Castoria; but the public at large does not have the right to sell this laxative compound under the name of Star so as to deprive John Smith of the fruits of his advertising and business energy. Not only will the Courts prevent another from marketing Castoria under the name of Star, but the Courts will prevent any other person from putting out an entirely different laxative compound and calling it Star. In the latter case it will be seen that

not only is the infringer pirating the good name, reputation and fame of John Smith's Star Laxative compound, but in addition, is perpetrating a fraud upon the public by representing to the public that the spurious Star Laxative is the Star Laxative compound well known to the public and which the public has purchased as being of John Smith's manufacture.

While John Smith may have a proprietary right in the name Star as applied to a laxative compound, such a fact will not prevent Brown or Jones from selling Castoria under a different name such for instance as Crescent or Moon, and acquiring proprietary rights in the particular names they have adopted, and their rights will be protected by the Courts to the same extent that the rights of John Smith in his name Star, are protected.

So-called secret preparations, those in which the ingredients, the proportions thereof, or the method of mixing them are retained in secrecy by the manufacturer, may also be called proprietary medicines, because the formula in this instance is the property of the manufacturer. The Courts have held with respect to this that the workmen employed by the manufacturer, having acquired knowledge of the manner of making the secret compound, will be prevented from exercising his knowledge to the detriment of his former employer.

It will be noticed in the above-

noted instance that fraud enters into the proposition and is undoubtedly an important and possibly a controlling element in all cases of this kind. By maintaining secrecy with relation to the method of making a compound, the manufacturer hopes to vest in himself a monopoly more secure and exclusive than is granted in the way of letters patent, and for an indefinite length of time. The only risk the manufacturer runs in pursuing this policy is that some one else, through no fraudulent act, but due to his own knowledge and energy, may discover the secret connected with the compound, when, if the compound is not of a patentable nature and cannot be patented, or if it has been in public use or on sale in the United States for more than two years, so that no patent will be granted thereon, the originator of the preparation is no longer the individual possessor of the secret, as knowledge thereof is in the possession of another and possibly may be disclosed to many others. I know of no case where one who, by no act of fraud, but through his own individual labors discovered the secret of manufacturing a compound, has ever manufactured and attempted to sell such a compound on the market under the same name adopted by the original maker. By analogy, however, it would seem that the discoverer of the secret would be entitled to call the preparation by the name under which it had been sold by its original manufacturer, because that

would be the only proper name for it. Should he call it by a new and fanciful name, a proprietary right in that name would become vested in him.

The answer to the question "When is a patent medicine not a patent medicine?" is, therefore, when the patent for the medicine ceases to exist. A proprietary right may exist with respect to a new and fanciful name for a medicine irrespective of the fact that said medicine may have at one time been patented, or that it may be an unpatented medicine. A proprietary right may also exist with respect to a secret formula to protect the owner of said secret formula against fraud.

#### DISCUSSION.

Dr. James Moores Ball asked if the law made provision for the revocation of a patent.

Mr. Cornwall replied that the law did not make any provision for the revocation of a patent. If the patent had been granted to one who was not the original inventor, one might, by proving that fact in court, and in a suit brought under the patent, have the original patent annulled.

Dr. James Moores Ball asked if there was an international patent law or agreement.

Mr. Cornwall replied that there was an international convention in which inventors from this country might apply for patents within one year from the date of their application in this country, and the same



right was granted here to foreigners. But a patent granted in the United States did not extend beyond the boundaries of the United States and the same held true of Great Britain and other countries. The Commissioner of Patents was appointed, not elected. As to the facetious remarks of Dr. Moore relative to the new and useful in patent medicines, if the subject matter of an application was a medicine, and it responded to the test of novelty and utility, the primary examiner was supposed to decide this. To determine whether an invention was new or not, he had only to consult prior patents and prior publications on the subject. If it was not found in any of them, then he might consider it new. As to utility, he had no means of determining that, except the statements of the inventor. Replying to a question by Dr. Homan, Mr. Cornwall said that when the application was filed the fee was \$15, which had to be paid when the application was lodged in the patent office. If decided to be patentable, the inventor must then pay \$20 before the issuance of the patent. The attorney's fee ranged from \$40 to \$50. Some of these advertised, "no patent, no fee." The patent office was the only institution in the government which had a surplus in the treasury. This was now more than \$5,000,000, drawn from the pockets of the inventors of the country.

Dr. W. M. C. Bryan asked what would be the necessary fee for copies

of the patents covering patent medicines.

Mr. Cornwall said, in reply to a query by Dr. W. M. C. Bryan, that copies of patents were sold for five cents each or all the patents in any class might be purchased at the rate of three cents each. The best way to get such information would be to have some one in Washington go into the patent office and secure those desired. They would probably forward the entire lot for \$3 to \$5.

Dr. William H. Stauffer wanted to know if there was any law requiring that the manufacturer of a patent medicine adhere to the original formula.

Mr. Cornwall replied that there was no law compelling the manufacturer to adhere to the original formula, but if the medicine was not made in accordance with the particular method upon which the patent was secured, then the patent did not cover it. This was one of the questions raised in the suit brought against the manufacturers of Castoria. It was said that the manufacturers of Castoria were not making it according to the original formula.

Dr. Walter B. Dorsett wanted to know if the formula for listerine was on record in the patent office.

Mr. Cornwall replied that it was not. Listerine was a secret nostrum.

Dr. Barclay thought that both the opinions of the two gentlemen who appeared to differ so radically, were correct and harmonious. Fraud in

the case of a useful patent medicine would consist in the manufacturer selling the medicine to the public through and by misrepresentation, claiming that it was something that it was not, or that it did something that it did not do. Antiphlogistine, for example, might be in a sense, "new and useful," but it might not be so for the particular purpose for which the manufacturers advertise it. Dr. Barclay asked whether the law required the manufacturer to specify, in his application for a patent, wherein a thing was "new and useful."

Mr. Cornwall replied in the affirmative.

Dr. Barclay: Were the manufacturers at liberty subsequently to add anything they pleased to that in placing it before the public?

Mr. Cornwall said they were.

Dr. Barclay thought that, this being the case, if it could be shown that the patent on an article had been secured by fraud, the patent would thereby be made null and void. If on the other hand the manufacturer, in offering it to the public for sale, claimed the remedy did things which it did not do, it was certainly fraud, and was actionable in the jurisdiction of the courts of justice.

Dr. C. A. Snodgras, thought that from the discussion the gentlemen present had a poor opinion of what was being done at Washington City, in the issuing of patents for patent medicine. He further stated that Dr. Rosenau was doing some of the

best work that was being done in the world in the testing of biological products that were being put upon the market by manufacturers. Dr. Snodgrass stated that he was informed by Dr. Rosenau, when he visited his laboratory in the early part of the year, that it was the intention of the management of the hygienic laboratory to take up the standardization of certain drugs, such as extracts. The speaker stated that some one should be selected who is competent to pass upon the therapeutic value of the drugs used in the practice of medicine, and those that were to be incorporated in the formula upon which patents were issued, and that all such action should be based, if possible, upon a physiological test. He stated that any medical man who would give a drug when in doubt as to its exact physiological action was not worthy of the title "Doctor."

Mr. Cornwall said that these experiments had been carried out in the agricultural department. While the patent office had a laboratory for making experiments, it was seldom resorted to.

Dr. Ravold said we have heard that when application is made for a patent upon a preparation, that the formula, the method of manufacture and what it is intended to be used for, must be given, but he desired to know whether it was necessary for the applicant to file a sample of the preparation with the application.

Mr. Cornwall said it was not.

Dr. Ravold: Then the Government, through its Patent Office, never knows, or inquires, or has any method of ascertaining whether a preparation sold under a patent contains the ingredients set forth in the formula of the petition. In fact "any old thing" can be compounded and sold under a patent, once obtained.

Mr. Cornwall said Dr. Ravold was correct.

Dr. Ravold said he must then agree with a previous speaker that drawing a hard and fast line between what is and what is not an ethical patented preparation, is very fine hair-splitting. From the information obtained tonight he was decidedly in doubt if the word ethical could be applied to any patent medicine.

Dr. Robert Barclay said that he would like to have the essayist to give the present legal definition of the term "Property" which had been used. As he understood it, the word "Property" signified "an abstract right or title to any thing and not the thing itself;" or, in other words, "Property was possession with sanction of law."

Mr. Cornwall replied that property existed in three forms: real, personal and voted rights; the latter being created by the statutes must be literally contrued. The rights in

a patent were vested by the statutes. A common law right would be protected by common law, but a patent right, being a statutory right, would not be protected by common law but only by the statutory enactment. It was not a personal or real right, but evidenced by a certificate or grant.

Dr. Barclay said that according to modern law, relating, for instance, to real estate, as he understood it, a man had a right to the so-called natural uses of his property irrespective of the effects thereof upon that of his neighbors' property. If correct in this, did it hold good also with respect to the patent right?

Mr. Cornwall replied that a patent right was a contract between the government and the inventor or his assignees. The thing to be patented must be new and useful. In that case it did not take anything away from anyone. If an individual or a community had it in possession, then it would not be new, and if it was not useful, the patent would not be granted. It was not with the idea of taking anything away from anyone, or encroaching upon any one's rights, that the patent was granted. The intention was to give an inventor of a new and useful improvement the exclusive right, for seventeen years, to make, use and sell his invention. At the end of seventeen years it became the property of the public.



# Journal Missouri State Medical Association

The Official Organ of the State Association and Affiliated County Societies.  
Published Monthly under the supervision of the Publishing Committee

ADDRESS ALL COMMUNICATIONS TO 534 NORTH VANDEVENTER AVENUE, ST. LOUIS.

Volume II.

JANUARY, 1906.

Number 7

C. M. NICHOLSON, M. D., EDITOR  
E. J. GOODWIN, M. D., ASSOCIATE EDITOR

PUBLICATION COMMITTEE.

C. M. NICHOLSON,

F. J. LUTZ.

B. M. HYPES.

WALTER B. DORSETT.

## EDITORIAL.

### OBSCENE ADVERTISING.

The action of the St. Louis Medical Society in initiating a fight against indecent advertisements in the local newspapers should be commended not only by the profession of St. Louis but of the country generally.

A committee consisting of Drs. Homan, Brown, and Scherek was appointed to call the attention of the city attorney to violations of section 1447 of the city ordinance, which follows:

Any person who shall in the city of St. Louis advertise or cause to be advertised in any newspaper printed or circulated in said city, or shall print or publish any advertisement or notice in any newspaper printed or circulated as aforesaid, purporting to give information as to the treatment of venereal or private or womb

diseases, or impotency, self-abuse, sterility or any disease pertaining to the genital organs, or purporting to give information from whom or where medicine or medical treatment may be procured in the above mentioned cases, or any of them, shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than fifty nor more than five hundred dollars for each and every offense. (R. O. 1892, sec. 988).

Information against several of the advertisers was furnished and Mr. I. V. Barth was retained by the society to assist the city attorney. The first of these cases was against Dr. Nathaniel K. King, and was tried December 1st. The attorney for the defendant admitted that the ordinance covered the case, but contended that it was unconstitutional on the grounds that the ordinance was not a proper exercise of the po-

lice power but on the other hand an unwarranted and unnecessary encroachment upon personal liberty, and that, assuming the regulation to be a proper exercise of the police power by the State, it does not fall within the purview of the Municipal Assembly, and hence is void and of no effect.

Counsel for the prosecution held that the ordinance was not, as contended, a prohibition of a man practicing or advertising a legitimate occupation, viz., that of a physician, but a regulation of such advertising.

Regarding the defendant's contention that the prohibition to advertise these matters hurt the defendant's business, counsel quoted Judge Cooley on Constitutional Limitations, that the most proper business may be regulated to prevent it becoming offensive to the public sense of decency, and urged that the practice of medicine is almost everywhere regulated by statutory limitation. Regarding the contention of the defense, that in any event such action was *ultra vires* for the city, even though it might be a proper police regulation for the State, counsel referred to the "General Welfare Clause" of the city's charter, and cited cases already decided showing the broad construction put by the courts thereon; and he further established the fact that even though by the general law of the State, a person could be proceeded against under State authority before a Justice of the Peace, that did not pre-

vent a corporation from making and enforcing a local regulation on the same subject. The Court rendered judgment against the defendant, assessing a fine of \$50.00 and costs. It seems not unlikely that an appeal to a higher court will be taken and no stone left unturned to secure a reversal. But a victory has been won, one which should encourage the society to proceed along this line until the city is rid of such advertisers.

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#### PUBLICATION COMMITTEE.

During the past month the Publication Committee has received a number of communications from members regarding advertisements, also the following resolutions from the Cass County Medical Society, "Resolved that the Cass County Medical Society request the Committee on Publication to admit the advertisement of no proprietary remedy to the pages of the JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION, except such as are accompanied by complete formula."

It is with much pleasure the Publication Committee recognizes the active interest of the members of the Association in the JOURNAL. As members of the Association, therefore part owners of the JOURNAL, they should offer such criticism as will result in the betterment of our official organ. Last September the Publication Committee held a meeting and ordered all advertisements of proprietary remedies intended for internal administration, where for-

mula does not accompany, omitted from the advertising columns. As soon as the present contracts expire no advertisements will appear which do not comply with the above ruling. A meeting of the committee will be called to pass upon all advertisements and no contract will be made until after copy of advertisement has been submitted to and approved by the committee.

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### THE JEFFERSON CITY MEETING.

The program for the annual meeting of the State Association is being prepared. Secretaries of Medical Societies are requested to forward without delay to the Chairman of the program committee, titles of papers to be read at the annual meeting.

It is hoped every component society will be represented. The meeting place being well located and our membership more than two thousand we should have at least seven hundred in attendance.

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### OBITUARY.

Dr. C. W. Robertson of Ridgeway, Mo., died in San Antonio, Texas, on Monday, December 11th. He had gone to Texas in the hope that a change of climate would prove beneficial to him and lengthen life's span for a time at least. But alas, the

great white plague would not yield to either climate or medicine and claimed its victim.

Dr. Robertson was born in the state of New York near Niagara Falls. When a young man he graduated from the Buffalo Medical College and then settled in Ridgeway, Mo.

At first he taught school near Ridgeway but soon opened an office and began active general practice which he followed for twenty-five years without interruption until failing health compelled him to retire.

As a business man he was successful and public spirited. No enterprise for the improvement and betterment of our city failed to receive his support.

As a physician he was thoughtful and studious, honorable, manly. As a consultant he was somewhat reserved yet ever ready to give an opinion when requested to do so.

In the death of Dr. Robertson Harrison County Medical Society has sustained a great loss. He was a member of every society that has been organized in the county. A believer in the power for good of a well ordered medical society, he was of the first to foster and promote when an attempt was made to organize and the last to give up the struggle when interest waned.

W. H. W.



## COUNTY SOCIETY NOTES

## BATES COUNTY MEDICAL SOCIETY.

Dr. A. E. Lyle, President.

Dr. E. N. Chastain, Secretary.

Bates County Medical Society held its regular meeting in Butler on December 14th. There was a good attendance of the members and the meeting was a very interesting one.

Several cases were presented and the conditions discussed by all present. This was one of the most enthusiastic meetings ever held in Bates county and all who attended felt that they had been much profited.

The election of officers for 1906 resulted as follows: President, J. R. Coulson, Spruce; vice-president, T. F. Lockwood, Butler; secretary-treasurer, E. N. Chastain, Butler; delegate, A. E. Lyle.

The following were appointed to prepare papers for presentation at the next annual meeting of the State society: Drs. T. F. Lockwood, E. N. Chastain and Miller.

E. N. CHASTAIN, Secretary.

## BUCHANAN COUNTY MEDICAL SOCIETY.

Dr. P. I. Leonard, President.

Dr. C. W. Fassett, Secretary.

The Buchanan County Medical Society met in open session, November 18th, the President, Dr. Leonard, in the chair. Invitations had been previously sent to the clergy and to

the legal profession to meet with the society and discuss the methods of prophylaxis of venereal disease and the need of sexual education. Dr. Chas. G. Geiger read a paper on "The Prophylaxis and Sequelæ of Venereal Disease."

Dr. Geiger began by stating that gonorrhoea and syphilis, two very widely spread diseases, are most frequently attendant on harlotry. That at the present time gonorrhoea had come to overshadow syphilis in its baneful influences, causing as it does sterility, inflammation of the uterus and adnexa and often fatal peritonitis, endocarditis and septicaemia. Various statistics were quoted, among others those of Noeggerath showing that of every thousand men married in New York City 800 had had gonorrhoea; those of the commission appointed by the American Medical Association showing that 42 per cent of all gonorrhoeal subjects became sterile, and those of Price showing that of 1,000 abdominal operations in women, 85 per cent were for the cure of conditions due to gonorrhoea.

Dr. Geiger then stated that he believed that by educating the people to the great danger of venereal diseases and by teaching the outlines of the physiology of the genito-urinary organs in the high schools and literary universities and by evening lectures to the working people, much could be accomplished in

preventing the spread of these diseases. Educate the individual as every one must make his own, or her own, morals. Teach scientific facts in a systematic, concise and acceptable manner so that men and women will see the need of protecting themselves.

Dr. Chas. Wood Fassett read a paper entitled "The Need of Sexual Education." Dr. Fassett said that today we behold the appalling spectacle of the youth of our land reared in almost total ignorance of his procreative powers and indulging in various indiscretions before he has reached the age of eighteen; of girls reared in the lap of motherly love surrounded by a veil which conspires to darken everything connected with their reproductive organs and as a consequence they often enter the matrimonial state with little or no knowledge of its demands or responsibilities. That budding nature of youth stimulated an abnormal curiosity and if we do not supply the natural amount of information concerning the functions of the procreative organs this knowledge will be obtained through the medium of lewd companions, obscene pictures etc., thereby generating a depraved and perverted taste for forbidden fruit. That sexual education is not wrong and that today our system of education does not provide instruction along these lines. As a remedy for these conditions Dr. Fassett urged education. Teach the youth elementary physiology and anatomy

of the stomach, heart, etc., and at the proper time, the structure and function of the sexual organs. He also thought that at present the tenor of sentiment was changing and that a move toward education had already begun to manifest itself and that people were demanding education on these topics and clean literature for their families.

These papers were freely discussed by members of the society and by the visiting clergymen, lawyers and teachers.

CLARENCE GOOD, Reporter.

#### CASS COUNTY MEDICAL SOCIETY.

Dr. R. D. Ramey, President.  
Dr. J. S. Triplett, Secretary.

The regular quarterly meeting of the Cass County Medical Society was held at Harrisonville, December 7, 1905, the President, Dr. R. D. Ramey, in the chair.

A paper on "The Physician as a Business Man" was read by Dr. W. F. Chaffin of Raymore. This was an excellent paper and was discussed at length by Drs. Dawson, Overholser, Brierly, Triplett, Farrow, Crawford, Schoor and Elder.

Dr. M. P. Overholser, Harrisonville, read a report of the Committee on Public Health and Legislation, which set forth the steps which have been taken toward the prosecution of illegal practitioners in the county. This report clearly and emphatically demonstrated that it is no fault of the regular medical profes-

sion that these offenders have not been brought to trial and legally punished, but that the fault lies with the legal arm in not enforcing the law, promptly and energetically.

Dr. M. P. Shy of Knobnoster, president of Johnson County Medical Society, was a visitor at this meeting and upon a unanimous vote of the society to participate in the discussion, made suggestive remarks upon questions before the society.

It was moved that a committee composed of the president, vice-president and secretary draw up a set of resolutions setting forth the earnest desire of the Cass County Medical Society to bring to trial the case of the State of Missouri vs. McCleary without further continuance and to present the same to the prosecuting attorney. Seconded and carried.

It was moved, seconded and carried that the society extend a vote of thanks to Dr. H. Jerard, of Pleasant Hill, for his efforts in causing the arrest, conviction and fine of "Dr." J. T. Davis for practicing medicine illegally at Pleasant Hill.

Dr. H. S. Crawford, of Harrisonville, read the resolutions endorsing the fight which *Collier's Weekly*, *The Ladies Home Journal* and other high class publications are making against the nostrum evil, which were adopted by the society.

Dr. J. S. Triplett presented a set of resolutions asking the Committee on Publication to admit the advertisements of no proprietary remedies to the pages of the Journal of the

Missouri State Medical Association unless such advertisements are accompanied by their complete formulæ, provided such formulæ have been corroborated by the Council of Pharmacy and Chemistry of the American Medical Association. These resolutions were unanimously adopted by the society.

Dr. R. D. Ramey addressed the Society as retiring president. A quiz on Fractures and Dislocations of the radius and the ulna was conducted by Dr. A. R. Elder.

Dr. H. S. Prentiss, of Pleasant Hill, was elected to membership upon presentation of a transfer card from the Jefferson County Medical Society.

Dr. J. C. Belcher, of Pleasant Hill made application for membership which was referred to the board of censors.

The secretary presented the following data for 1905:

Total number members.....	30
Members lapsed during year...	3
Members died.....	1
Members removed from county.	3
New members received.....	1
Members in county.....	27
Physicians in county not members.....	20
Total number of physicians in county .....	47
Cash on hand Dec. 1, 1905....	\$25.75

The society extended a vote of thanks to the retiring president and secretary for faithful service performed.

The following resolutions were



unanimously adopted:

Whereas. The American people are being daily humbugged, robbed and poisoned by venders of patent nostrums, and that largely through the medium of the press, and

Whereas, through their fearless, scathing and denunciatory editorials *Collier's Weekly* and *The Ladies Home Journal* are doing excellent good in their commendable campaign against these fraudulent schemes, be it

Resolved, That the Cass County Medical Society extend its heartiest thanks and highest commendations to P. F. Collier & Son and the Curtis Publishing Company for their splendid work. And be it further

Resolved, That copies of these resolutions be furnished the Editors of *Collier's Weekly*, *The Ladies Home Journal*, *The Journal of the American Medical Association* and the *Journal of the Missouri State Medical Association*.

The following officers were elected for 1906:

President, G. W. Farrow; vice-president, H. A. Brierly; secretary and treasurer, W. F. Chaffin; delegate, J. S. Triplett; reporter, W. F. Chaffin.

The Society adjourned to meet at Belton on the first Thursday in March, 1906.

J. S. TRIPLETT, Reporter.

## CHARITON COUNTY MEDICAL SOCIETY.

Dr. H. C. Tatum, President.

Dr. C. A. Jennings, Secretary.

The Chariton County Medical Society held its regular monthly meeting in Salisbury, November 16th. The meeting was called to order by the president. The minutes of the last meeting were read and approved.

Dr. Burton read an excellent paper on "Pneumonia and its Treatment." The discussion which followed was both interesting and instructive.

Dr. J. H. P. Baker presented a patient, a negro man about 30 years of age, suffering from a gunshot wound of the left knee.

On motion a committee was appointed to make up a year-book of the meetings for the year 1906.

By unanimous action it was decided that the society have a banquet at its December meeting.

The next meeting will be held on December 21st.

W. L. BAKER Reporter.

## CLINTON COUNTY MEDICAL SOCIETY.

Dr. John Sturgis, President.

Dr. E. A. Colley, Secretary.

The Clinton County Medical Society met in Plattsburg, December 5th, with a fair attendance of the

members, the meeting being called to order by the president. The minutes of the last meeting were read and approved.

This being a business meeting the society proceeded to the election of officers which resulted as follows: President, John Sturgis, Perrin; vice-president, G. B. Bush, Lathrop; secretary-treasurer, E. A. Colley, Plattsburg; censor for three years, John Kay, Perrin.

After the election the society adjourned to partake of a dinner prepared by the entertainment committee.

The next meeting will be held in Plattsburg, January 2, 1906.

E. A. COLLEY, Secretary.

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### COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.

Dr. J. R. Lionberger, Secretary.

The Cooper County Medical Society met in Boonville on December 5th, 1905, at the W. O. W. rooms. Members present: Drs. P. L. Hurt, F. R. Smiley, A. J. Smith, R. L. Evans, O. W. Cochran, J. T. Taylor, Jno. R. Lionberger.

President P. L. Hurt called the meeting to order. The minutes of the former meeting were read and approved.

The subject of a fee-bill was brought up and freely discussed by all members present; however nothing definite was determined upon as such a subject seemed difficult to decide. All the members present

agreed that a uniform charge should be adopted, and that in the near future the profession of Cooper county would arrange a fee-bill of uniform charges.

The annual election of officers was then held with the following results:

President, O. W. Cochran, Gooch Mills; vice-president, F. R. Smiley, Boonville; secretary and treasurer, Jno. R. Lionberger, Boonville; member of board of censors for three years, A. L. Meredith, Wooldridge; committee on public health and legislation, Drs. F. R. Smiley, P. L. Hurt and A. J. Smith.

The name of Dr. H. A. McDonald of Pisgah was presented for membership and referred to the Board of Censors.

There being no further business, the Society adjourned to meet January 2, 1906.

JOHN R. LIONBERGER, Secretary.

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### THE GRAND RIVER MEDICAL SOCIETY.

The thirtieth annual meeting of the Grand River Medical Society convened in Chillicothe on Thursday, December 7th, 1905. The meeting was well attended by the members with quite a number of visitors and honorary members from Kansas City and St. Joseph. Following is the program which was carried out: 1. Modern Methods of Removing Foreign Bodies from the Upper Air Passages, by Hal Foster,

of Kansas City. 2. Sudden Death During or Shortly after Termination of Pregnancy, by Tinsley Brown, of Hamilton, Mo. 3. Appendicitis, by O. Beverly Campbell, of St. Joseph. 4. Appendicitis, by H. C. Crowell, of Kansas City. 5. Pneumonia and its Treatment, by H. M. Grace, of Chillicothe. 6. Enlarged Prostate, by J. Block, of Kansas City. 7. Treatment of Dacryo-Cystitis, by Flavell B. Tiffany, of Kansas City. 8. Non-Calculous Obstruction of the Common Bile Duct, by A. H. Cordier, of Kansas City. 9. Remarks by the Retiring President, by J. A. Waterman, of Breckinridge, Mo.

These papers were all meritorious and were ably discussed. This was one of the most interesting sessions held by this society for many years. Quite a number of new members were added.

The following officers were elected for the year 1906: President, J. F. Cherrington, Chillicothe; vice-president, C. C. Leeper, Braymer; secretary, A. J. Sampson, Chillicothe. The next meeting will be held at Hamilton, Mo., in December, 1906.

#### HENRY COUNTY MEDICAL SOCIETY.

Dr. W. M. Shankland, President.  
Dr. F. M. Douglass, Secretary.

The Henry County Medical Society met in regular session at Clinton on December 13th. The president called the meeting to order the following members being present:

Drs. Shankland, Benway, Head, Fanner, Barr, Haire and Douglass.

Dr. Haire read a paper on better county organization. Discussion of the paper was general each member giving his views of the best way to arouse the interest of members. It was suggested that reciprocal relations be established with some other county, the meetings held in different months and then take the best feature from one society and present it at the meeting of the other. The quiz was advocated, one member to be quiz master, the subject selected and published and each physician in the county notified. Dr. Head thought the meetings would have been of more general interest if those who had been appointed to read papers had attended and read a paper or presented cases, and if those members living close by had attended the meetings. Even some of the physicians in Clinton had failed to attend.

The election of officers for 1906 resulted as follows:

President, H. W. Benway, Deepwater; vice-president, C. W. Head, Windsor; treasurer, R. D. Haire, Clinton; secretary, F. M. Douglass, Clinton; censor, B. B. Barr.

Dr. W. C. Farrar, of Montrose, was elected a member.

F. M. DOUGLASS, Secretary.

#### HOWARD COUNTY MEDICAL SOCIETY.

Dr. A. W. Moore, President.  
Dr. C. W. Watts, Secretary.

Howard County Medical Society



met in the office of Dr. Wright at Fayette on November 21st. Interest in the Society seems to be lagging somewhat as there were but four members present. These were Drs. Bonham, Wright, Smith and Watts. The president, Dr. A. W. Moore, was unable to be present on account of illness. He has been suffering for some time from an attack of dysentery but is now recovering.

Dr. Smith presented an interesting case of gun-shot wound of the chest. A full report of the case is promised for the next meeting.

Dr. C. H. Lee has had remarkable success in the treatment of epithelioma of the eye in a patient seventy-five years of age. The growth was removed several weeks ago. It covered the inner canthus of the eye and weighed about three ounces. There was considerable hemorrhage at the time of removal but this was controlled with adrenalin. Later the x-ray was applied and the wound has healed, leaving but a small cicatrix. The patient says he sees better than he has for thirty years. This is the second successful operation which Dr. Lee has performed recently in this condition. We hope he will report these cases in full at a future meeting of the Society.

Dr. Bonham of Franklin reported an interesting case of salpingitis. Dr. Wright will report on some recent cases of tuberculosis at the next meeting. Dr. Watts spoke of the success which he had met in the treatment of typhoid fever and chronic

dysentery by instituting antiseptic treatment early in the disease. He believed the day was not far distant when typhoid fever would never pass the congestive stage as he thought the disease would be controlled by proper administration of internal antiseptics.

#### MEETING OF DECEMBER 5TH.

Howard County Medical Society met in regular session at Fayette, in the office of Dr. Watts, on December 5th, at one p. m. The following members were present: Drs. Moore, Lewis, Lee, N. E. Smith, Bonham, Fleet, Williams, Champion and Watts. The minutes of the last meeting were read and approved.

Dr. Fleet presented a very interesting case of hepatic disease in a boy about four years old. The child had ascites which was relieved by large doses of jalap and pot. bitart. et oposynum.

Dr. N. E. Smith reported a case of gunshot wound of the chest. The ball, .38 caliber, entered  $11\frac{1}{2}$  inches to the right of the sternum in the second intercostal space. It was removed between the scapula and the sixth dorsal vertebra. The wound was received about two weeks ago and several days ago he removed six ounces of a sero-sanguinous effusion from the right pleural cavity. The patient had a temperature which fluctuated between 100 and  $103\frac{1}{4}$  degrees and coughed up a tenacious sputum which contained some blood. Present condition: Appetite is improving, temperature  $101\frac{1}{4}$  degrees,

says he feels better.

Dr. Williams presented a case of gunshot wound of the wrist in a young man of 18 years of age. After cleaning the wound he applied benzoin treatment and the patient has made good progress.

The society then proceeded to elect officers for 1906 with the following result: President, V. Q. Bonham; vice-president, N. E. Smith; secretary-treasurer, C. W. Watts; member of house of delegates, C. O. Lewis; censors, C. H. Lee and J. H. Champion.

By unanimous vote the time of meeting was changed from the third Tuesday in each month to the first Friday.

C. W. WATTS, Reporter.

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#### HOWELL COUNTY MEDICAL SOCIETY.

Dr. J. W. Bingham, President.

Dr. H. C. Shuttee, Secretary.

Howell County Medical Society held its regular meeting on December 7th. It is with much regret that we must report no scientific work done at this meeting or at the meeting held in October. The essayists reported to read papers failed to attend the meeting or to send their papers to be read. It is hoped that with the New Year the members will renew their interest in the society and respond to requests for papers and attend the meetings.

It requires some sacrifice on the part of a busy doctor to forward the interests of the county society and

make it a success, but every physician should be willing to contribute his effort to this end and if necessary, sacrifice time and the consideration of his personal comfort. Only by united action and common interests can the great objects in view ever be attained. It is hoped that the physicians of Howell county will not fall behind in the work of maintaining harmonious organization and a unification of interests in the state of Missouri.

The following officers were elected for the year 1906:

President, A. H. Thompson; vice-president, H. C. Shuttee; secretary A. H. Thornburgh; treasurer, J. McBride Johnson; delegate, J. W. Bingham.

H. C. SHUTTEE, Secretary.

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#### JACKSON COUNTY MEDICAL SOCIETY

Dr. Robert T. Sloan, President.

Dr. Max Goldman, Secretary.

The Jackson County Medical Society held its regular meeting Thursday, November 9, 1905, Dr. H. O. Hanawalt in the chair.

The scientific program consisted of papers by Drs. A. E. Hertzler and Jos. W. Sherer, and the report of a case by Dr. Fred T. Van Eman.

Dr. Hertzler's paper was entitled "Sexual Neurasthenia, from the Standpoint of the Surgeon." The essay, which was thoroughly enjoyed by all present, though merely an introduction to the general subject of sexual functional disturbances, upon

which the doctor has been conducting some investigation, is to be commended for its striking originality and scientific character.

The definition suggested for the condition under consideration was "a pernicious nervous state, having a special cause as a rule, and referred to the sexual organs;" hence, not a true neurasthenia, or nervous exhaustion, but rather a sexual nervous affection due to a local condition. What were called typical cases were described in a general way, and then irregular types due to different causes were spoken of. Special mention was made of the physical findings, the author stating that he always used the endoscope when he searched for local changes. Some abnormal conditions were always found in these cases; such as congestion of the mucous membrane, hypertrophy of the skin of the genitals, raw surfaces on the mucous membranes owing to the excessive congestions, the presence of abundance of oxalates in the urine, tenderness, local redness, etc. The prostatic urethra and the trigone of the bladder were quite often involved in the local changes.

As regards the treatment, circumcision was recommended as both prophylactic and curative; any other irritations should be removed. Though varicocele often accompanied organic or psychical causation, or of resection did not relieve the primary disturbance. Bromides should be tried to control nervous symptoms

and strychnine as a tonic, though if given early it might aggravate the condition. The local treatment was of course of greatest importance; the nitrate of silver in the strength of 1 per cent. was recommended; one should guard against using a too strong solution. The local treatment should be carried out patiently and intelligently, for other methods usually recommended are of little or no benefit.

The essayist reported some 20 cases; "ten belonging to the so-called intelligent class, six to the class below the average intelligence, representing the neurotics, and four others." Nearly all, he stated, had recovered.

The prognosis, he said, was usually good. In older individuals the condition seemed to be more obstinate; and the obese patients have been, in his experience, a failure. Where no special cause existed the prognosis was not so favorable.

Considerable discussion followed the reading of this paper, points of special interest being, (1) the name of the affection described, (2) its differentiation from the psychosis sexual hysteria, and (3) the precise etiology; i. e., whether it be of organic or psychical causation, or of both.

Dr. L. W. Luscher opened the discussion from the surgical view-point. He stated among other things, that the local irritation was largely responsible for the nervous condition. He mentioned also the "psycho-neu-



rotic sexual cases" ordinarily seen. Others taking part in the discussion were Drs. E. G. Mark, H. C. Hays, William Frick, H. D. Jerowitz, J. M. Langsdale, Carl Sandzen and H. O. Hanawalt. Dr. Hertzler closed the discussion.

Dr. Sherer's paper, while dealing with some of the rare as well as more common "Ocular Sequelæ of Diphtheria," was of special interest because of the report of a case of ciliary paralysis presenting atypical conditions. This case was characterized by anesthesia of the retinae, and, briefly, presented the following features of interest: (1) paralysis of accommodation; (2) no involvement of the iris; (3) contraction of the visual field of each eye; (4) some alternating contraction of the visual fields due to anesthesia retinae. The patient, aet. 17 years, recovered completely.

The doctor stated that the ciliary paralysis was due to a toxic neuritis in the peripheral nerves. He considered the pathology of the condition, and mentioned among other ocular sequelæ, paralysis of the various ocular muscles, orbital abscess, neuro-paralytic keratitis, et cetera. The prognosis was usually good. The treatment consisted of local measures and reconstructive tonics.

The paper was discussed by Drs. H. H. Lock, H. D. Jerowitz, and W. M. Reed. Dr. Sherer closed the discussion.

Dr. Van Eman reported a case of "Atrophy of the Testicle." After

the patient had suffered several attacks of acute inflammation of his right testis, evidences of atrophy began to develop until at the present time there is left merely a small hazel-nut sized organ. In the discussion, which proved of considerable interest in a general way, questions relative to the precise etiology and treatment were especially mentioned, though but little light was thrown upon the case under consideration. Drs. E. G. Mark, J. Q. Chambers, H. C. Hays and H. D. Jerowitz discussed the case reported, and Dr. Van Eman closed the discussion.

The society adjourned till its next regular meeting, November 23, 1905.

#### MEETING OF NOVEMBER 23RD.

The Jackson County Medical Society met in regular session November 23rd, 1905, the President, Dr. Robert T. Sloan, in the chair.

The professional program consisted of a paper by Dr. W. M. Reed, entitled "The Modern Treatment of Diseases of the Frontal Sinuses," and the report of a case of "Appendicitis with Complications," by Dr. H. C. Crowell.

Dr. Reed, in an original and instructive paper, gave first a general description of the frontal sinuses, and their relations to the neighboring sinuses. A consideration of the surgical treatment of sinus disease followed, with the recommendation of the so-called conservative method of treatment. The essayist described his method of entering the fron-

tal sinus through the nasal chamber, and then reported a case of empyema of the frontal and maxillary sinuses in which great relief followed the establishment of drainage through the nasal passages. The doctor compared the value of some external radical operations on the frontal sinuses with the intranasal one and closed by again advising the conservative method of treatment. A number of excellent specimens of frontal, maxillary, and sphenoid bones illustrating the sinuses were exhibited.

Dr. J. F. Sawyer opened the discussion, Drs. H. G. Tureman, H. H. Look, T. S. Blakesley, C. D. Burke and Jos. S. Lichtenberg also taking part. Dr. Reed closed the discussion.

Dr. Crowell's report of a case of appendicitis was of unusual value from the standpoint of clinical instruction. As was well stated by the doctor, cases complicated and followed by an atypical train of symptoms, though they might terminate fatally occasionally, are nearly always of extremely great practical value. In the case reported, an operation for a periappendicular abscess in a woman aet. 34 years was performed in the ordinary manner; drainage was employed after some pus was removed. Following the operation the patient complained of some pain in the abdomen, the pain continuing to increase in severity; she vomited and belched considerably, and passed some gas from the bowels about the beginning of the

second day; the pulse became rapid and continued to increase in rapidity though the temperature at no time was high. The patient continued doing badly for four days when upon exploration on the operating table by a second laparotomy, a portion of bowel was discovered attached to the bladder by recent adhesions; it was strangulated by reason of this, and, in addition, necrosed and perforated near the point of strangulation; all efforts to save the patient's life failed.

From a study of the progress of this case after the primary operative interference, giving as it does a clear history of ileus, what lessons one could learn! though it would be quite difficult, as was stated by the essayist, to differentiate such an ileus from a septic sequel of an operation for the condition here presented.

The discussion was opened by Dr. A. E. Hertzler, Drs. F. T. Van Eman, D. R. Porter and C. B. Hardin also taking part. Dr. Crowell closed the discussion.

The Society adjourned till its meeting December 14, 1905, the annual meeting.

#### MEETING OF DECEMBER 14th.

The Jackson County Medical Society held its annual meeting on December 14th.

The election of officers for the year 1906 resulted as follows:

President, Dr. E. B. Thrailkill; vice-president, Dr. C. H. Dove; Secretary, Dr. Max Goldman; treasurer, Dr. L. W. Luscher; delegates, Dr.

Herman E. Pearse, Kansas City; Dr. F. L. Cook, Blue Springs; Dr. W. J. Frick, Kansas City; Dr. J. M. Frankenburger, Kansas City; Dr. N. P. Wood, Independence.

The report of the various officers for the year 1905 indicates that the society has been making very satisfactory progress; the growth in membership and the character of the scientific work done by the society are both to be commended.

MAX GOLDMAN, M. D.,  
Secretary.

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### JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.  
Dr. H. Will Elders, Secretary.

The regular meeting of Jefferson County Medical Society was scheduled for November 28th. As there were not enough members present to form a quorum no business was transacted. Those attending enjoyed the evening in social conversation on various topics.

H. WILL ELDERS, Secretary.

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### JOHNSON COUNTY MEDICAL SOCIETY.

Dr. M. P. Shy, President.  
Dr. E. H. Gilbert, Secretary.

The regular meeting of Johnson County Medical Society was called to order by the president in Warrensburg, on December 12th. There was a good attendance of the members and one new member was elected.

The program for the evening had

been mailed to all members and each one who had been appointed to read a paper was ready with his contribution. Dr. T. L. Bradley read a paper on "Tracheotomy *vs.* Intubation." The discussion on this paper was opened by Dr. W. Thompson. Other papers were read by Dr. John T. Anderson, Dr. O. B. Hall and Dr. Wm. H. Aber.

The following officers were elected to serve during 1906: President, T. L. Bradley, Warrensburg; vice-president, L. J. Schofields, Warrensburg; secretary, E. H. Gilbert, Warrensburg; treasurer, C. B. Mall, Warrensburg; censor, Wm. H. Aber, Montserrat; delegate, J. I. Anderson, Warrensburg.

The reports of the secretary and the treasurer showed the society was in a flourishing condition.

Dr. M. P. Shy, retiring president, was selected to read a paper before the Jefferson City meeting of the State Association.

E. H. GILBERT, Secretary.

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### KNOX COUNTY MEDICAL SOCIETY.

Dr. L. S. Brown, President.  
Dr. H. Jurgan, Secretary.

The regular meeting of the Knox County Medical Society was held on December 4th, Dr. James Myers in the chair. The minutes of the previous meeting were read and approved.

A communication from the secretary of the state association was read in regard to papers for the next



annual meeting of the state association.

The treasurer submitted a report of the expenses incurred and on motion the accounts were allowed.

For the next meeting the president assigned papers to Drs. Arnett, of Novelty, and F. E. Luman, of Barling.

The officers were elected for 1906 as follows: President, L. S. Brown. (re-elected); vice-president, R. J. Northcutt; secretary-treasurer, H. Jurgen (re-elected); censor for three years, H. H. St. John.

On motion Dr. Jurgen was requested to prepare a paper for the meeting of the state association at Jefferson City next May.

A vote of thanks was tendered the officers for the efficient work done by them during the year.

The next meeting will be held on the first Monday in February, 1906:

H. JURGEN, Secretary.

## LINCOLN COUNTY MEDICAL SOCIETY.

Dr. S. R. McKay, President.  
Dr. W. P. Smith, Secretary.

The Lincoln County Medical Society met in regular session at Troy on Nov. 9th, 1905. After reading minutes, and regular routine work was disposed of, the scientific program was taken up.

Dr. L. Pendleton read a paper on "The Use and Abuse of Some Drugs. Especially Quinine and Arsenic." Digitalis and the two drugs named brought out a general discussion.

By invitation Dr. Tainter of St. Charles read a paper on "Some Peculiar Forms of Hernia," which was enjoyed by the society, especially the remarks on different diagnosis.

Dr. C. D. Avery read a paper on "Abortion," which was very thorough, and brought out much favorable comment.

W. P. SMITH, Secretary.

## MARION COUNTY MEDICAL SOCIETY.

Dr. R. H. Goodier, President.  
Dr. F. Janet Reid, Secretary.

The regular meeting of the Marion County Medical Society was called to order by the president on December 1st. The attendance was good.

The topic for discussion was "The Relation of Membranous Croup and Diphtheria." Dr. R. Schmidt opened the discussion and during his remarks mentioned a number of cases of the two forms of the disease, on some of which he had performed tracheotomy with success. He laid special stress upon the early and free use of antitoxin in both laryngeal and pharyngeal manifestations of the disease. Others followed in the discussion and all seemed to be of one opinion concerning the identity and etiology of the two forms, namely, the Klebs-Loeffler bacillus. Some difference of opinion developed as to the relative contagiousness of the laryngeal and the pharyngeal varieties some of the members believing the former less contagious than the latter. The merits of intubation and

tracheotomy were discussed at some length.

Dr. Baskett stated that in seven intubations done for obstruction from diphtheria and other causes he had been able to save five patients from impending death. The difficulties attending the making of tracheotomies and intubations were discussed and it was stated that usually the surroundings of the patient were wholly unpromising.

Dr. E. H. Bounds related a case of a child with a fracture of the radius without fracture of the ulna.

Dr. W. H. Mays reported a case of pneumonia in a man past sixty years of age. He saw the patient on the sixth day of his illness and found him sitting up in bed, the temperature being  $102\frac{1}{2}$  degrees. There was consolidation of the right lung. The crisis came during the night accompanied with profuse perspiration. On a second visit the temperature was normal and convalescence had begun. The patient was an alcoholic.

Dr. Thos. Chowning reported a case of labor that was uneventful until the eighth day after confinement when the patient was siezed with a sudden and severe pain in the right lumbar region, temperature  $102.2$  degrees, pulse 120. The pain was relieved by a hypodermic injection of morphine. On the following day there was a similar attack on the left side which pursued the same course. The cause was obscure.

Election of officers for 1906 re-

sulted as follows: President, R. Schmidt; vice-president, F. W. Bush; secretary-treasurer, H. L. Banks; reporter, E. H. Bounds, delegate, Thos. Chowning; censor, J. J. Bourn.

H. L. BURKS, Reporter.

## MONITEAU COUNTY MEDICAL SOCIETY.

Dr. J. B. Stewart, President.

Dr. W. R. Patterson, Secretary.

Moniteau County Medical Society met in regular session in California on December 14th. The meeting was called to order by the vice-president, Dr. A. V. Thorpe. Members present: Drs. A. V. Thorpe, H. C. Kleuber, H. Freudenberger, J. M. Robertson, J. B. Norman, J. E. English, J. P. Burke, W. R. Patterson.

The minutes of the last meeting were read and approved. Dr. L. L. Latham was elected to membership.

The committee appointed to report on a schedule for a fee-bill made their report. On motion the secretary was ordered to have a fee bill printed and to mail a copy to each member with the request that prices be set down as suggestions for consideration at the next meeting.

The following officers were elected to serve during 1906: President, J. M. Robertson, Latham; vice-president, A. V. Thorpe, Jamestown; treasurer, H. C. Kleuber, California; secretary, W. R. Patterson, Tipton; censor, H. Freudenberger, Center-town; delegate, W. R. Patterson, Tipton.

On motion the society requested Dr. J. B. Norma, of California, to prepare a paper at the next meeting of the State Medical Association at Jefferson City in May, 1906.

The next meeting will be held in California, March 8, 1906.

W. R. PATTERSON, Reporter.

### MONTGOMERY COUNTY MEDICAL SOCIETY.

Dr. J. L. Jones, President.

Dr. W. M. Wheeler, Secretary.

Montgomery County Medical Society held a meeting at Montgomery City on December 12th, the president, Dr. Jones, in the chair. After reading the minutes of the previous meeting and disposing of miscellaneous business matters, the scientific program was taken up.

Dr. G. E. Muns read a very excellent paper on "Lobar Pneumonia in Infants and Young Children." The discussion was opened by Dr. Nowlin followed by Drs. Hudson, Jones and Wheeler.

The hour of adjournment having arrived, Dr. Nowlin was requested to present his paper on "Tubercular Arthritis" at the next meeting which will be held at Montgomery City on the afternoon of the second Tuesday in February, 1906.

W. M. WHEELER, Secretary.

### NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. W. Lamson, President.

Dr. Horace Bowers, Secretary.

The Newton County Medical So-

ciety met in the office of Dr. Bowers, at Neosho on December 12th. The meeting was called to order by the president. The minutes of the last meeting were read and approved.

The election of officers for the ensuing year resulted as follows: President, R. L. Wills, Marshall; vice-president, P. C. Yates, Neosho; secretary, Horace Bowers, Neosho.

Dr. Doty presented a case of obstinate eczema of the leg in a child eight months old.

Dr. J. B. Hancock read an excellent paper on "Puerperal Fever." This paper brought out a lengthy discussion in which all the members participated. Many cases were reported during the discussion and the members expressed themselves as being much benefitted by the reading of the paper and the discussion which followed.

A program for the next meeting was arranged to consist of interesting clinical cases, a paper by Dr. William Campbell on "Placenta Previa" and a paper by Dr. R. L. Wills on "Rectal Alimentation."

The interest in these meetings is growing steadily, this meeting being one of the best that we have held. Eighteen members were present lacking only five of being a full attendance.

HORACE BOWERS, Secretary.

### PLATTE COUNTY MEDICAL SOCIETY.

Dr. R. P. Davis, President.

Dr. G. C. Coffey, Secretary.

The regular monthly meeting of



Platte County Medical Society was held in Platte City, December 6th, 1905.

The following physicians were in attendance: Drs. C. H. Chastain, Spence Redman, Virgil Morrison, H. M. Clark, R. P. C. Wilson, A. S. Herndon, H. H. Patterson, Alma Naylor, E. McD. Coffey, W. H. Smedley, R. P. Davis, G. C. Coffey.

After an elegant dinner at the Central Hotel, the Society was called to order by the president in the office of Dr. Spence Redman. Dr. Naylor, of Platte City, opened the discussion on "Pneumonia." He said we should observe strict rules in regard to the diet; should give patient plenty of fresh air; watch secretions closely; treat symptoms as they arise. He thinks more harm than good is done by trying to reduce the temperature. Always carefully watch the heart and when called for, use alcohol and strychnine, but use them carefully. Cold baths are best to reduce the temperature.

This subject was discussed very fully by all physicians present.

Dr. Alma Naylor of Platte City and Dr. Virgil Morrison of Iatan were admitted into the Society. Dr. S. Redman, treasurer, made his annual report which showed we were slightly behind in finances.

Dr. G. C. Coffey, secretary, made his annual report showing a membership of 16 for the beginning of the next year. Moved and seconded that our annual dues be increased from \$3.00 to \$3.50. Carried.

The application of Dr. H. M.

Clark, of Platte City, was received and referred to the board of censors.

Moved and seconded that Dr. Chastain, of Weston, deliver an address at our next meeting in January. Carried.

The election of officers resulted as follows: President, C. H. Chastain, Weston; vice-president, A. C. Barr, Linkville; secretary, G. C. Coffey, Platte City; treasurer, Spence Redman, Platte City; censors, R. P. Davis, Woodruff; delegate, Spence Redman, Platte City.

The following resolutions were adopted:

Whereas, Death has removed from earthly scenes the father of our esteemed co-worker and member of this Society, Dr. A. S. Herndon, be it therefore Resolved, That the members of this Society extend to him and his family our sincere sympathy in this hour of their sad bereavement. And resolved further, that these resolutions be spread upon our minutes and that a copy thereof be furnished to the family of Dr. A. S. Herndon.

Adjoined until January 3, 1906.

G. C. COFFEY, Secretary.

## ST. CHARLES COUNTY MEDICAL SOCIETY.

Dr. J. R. Mudd, President.

Dr. B. K. Stumberg, Secretary.

The quarterly meeting of the St. Charles County Medical Society was held on October 3, 1905. The minutes of the previous meeting were read and approved. The regular order of business was suspended and

the report of the board of censors was read. The applications of Drs. O. A. Muhm and H. N. Corley were favorably reported upon and both were elected by ballot. A motion was then made that the president appoint members to read papers at the next meeting. Motion carried.

Dr. Hardy read a paper on "Appendicitis and Diseases of the Peritoneum." The paper was discussed at length by all members present.

There being no other papers, the society proceeded to elect new officers. The election resulted as follows: President, J. R. Mudd; vice-president, F. P. Dunn; secretary, B. K. Stumberg; treasurer, Carl Bitter; censor, B. P. Wentker.

There being no further business the society adjourned to meet on the first Tuesday of January, 1906.

B. K. STUMBERG, Secretary.

#### ST. GENEVIEVE COUNTY MEDICAL SOCIETY.

Dr. M. Andre, President.

Dr. F. E. Hinch, Secretary.

The St. Genevieve County Medical Society met in the office of its secretary December 11, 1905, with a good attendance of members.

Dr. G. M. Rutledge read a paper criticising an article in the National Druggist of December, 1905, reflecting on the integrity and ability of physicians. This paper was discussed freely and a committee appointed to draft resolutions relative thereto and report at the next meeting.

New officers were elected to serve

the following year: President, C. Moore; vice-president, F. E. Hinch; secretary and treasurer, R. W. Lanning.

Dr. N. W. Jarvis was elected to membership in the Society.

The meeting adjourned to meet January 10, 1906.

F. E. HINCH, Secretary.

#### ST. LOUIS MEDICAL SOCIETY

Dr. F. L. Henderson, President.

Dr. T. A. Hopkins, Secretary.

The St. Louis Medical Society has convened in regular session six times since November 25th. The following papers, addresses, etc., have been presented:

##### MEETING OF NOVEMBER 25TH.

The scientific program for this meeting was a lecture by Dr. H. W. Loeb, on "The Anatomy of the Nose and Accessory Cavities," illustrated by numerous drawings, skulls, and a number of sections of the cranium and its contents, each about one-half an inch in thickness, by means of which the head might be built up or torn down at will, and the relationship of the different parts shown as it could be in no other way. These sections were made by Prof. Potter and are used by him in teaching anatomy at the Medical Department of St. Louis University; here they make use of sections, not only of the cranium, but of the entire body, in studying the relationship of the various parts. They are made by first hardening and preserving the body in formalin, then decalcifying by means of hydrochloric acid, after

which with an ordinary knife it may be cut in sections of the desired thickness, usually about one-half inch. The demonstration was unique and thoroughly enjoyed by all present.

#### MEETING OF DECEMBER 2ND.

At this meeting Dr. W. G. Moore offered the following resolution:

"Resolved, That the St. Louis Medical Society heartily endorse *Collier's Weekly* and *The Ladies' Home Journal* for the splendid stand they have taken against the great American evil—secret nostrums, commonly known as patent medicines; that copies of this resolution be transmitted to them, and that they be authorized to use same in any manner they may consider advantageous."

After an enthusiastic discussion the resolution was unanimously adopted.

The scientific program for the evening consisted of a paper entitled, "Cervical Lacerations and Their Repair," by Dr. Davis Forster. The doctor gave an excellent description of the pathological conditions found in these cases and advised that all cervical tears, no matter how slight, be repaired, if for no other reason than as a prophylactic measure against cervical carcinoma. The paper called forth a very interesting and thorough discussion by Drs. Dorsett, Funkhouser, Kieffer, Morris and Laidly, illustrated by black-board drawings.

#### MEETING OF DECEMBER 9TH.

At this meeting Mr. F. R. Corn-

wall, patent attorney, by invitation read a paper, entitled "When is a Patent Medicine Not a Patent Medicine." He said that, according to law, a medicine to be patented must be a new and useful product, the formula and method used in manufacture must be furnished, and are placed on record, which record is open to the public; the patent vests the property right in the patentee for a period of seventeen years, after which it becomes public property and anyone may then manufacture and sell it. When we consider the method used to determine whether it is new and useful, the inspector simply looking over the records in the patent office to determine the former, and guessing at the latter; also, that the patent office has no means of knowing if it is made true to formula, we see what a farce it really is. In proprietary medicines, the property right is vested in the name, which is copyrighted; anyone may manufacture them but cannot sell them under that name, but may market them under some other name. Secret nostrums are those where the formula and method of manufacture are both kept secret, and are the most numerous as well as most reprehensible.

After a very general discussion, a vote of thanks was given Mr. Cornwall.

The second paper of the evening, "Man and His Economic Relation to the Earth," by Dr. Geo. Homan, was an interesting one. While more socialistic than medical in its bear-



ing, the doctor made one statement in which all medical men are interested, but with which few will agree, viz., that economic conditions are to a great extent responsible for the enormous increase in the number of abortions; that the cost of living is so high that an addition to the family becomes a serious matter, and many seek to avoid it by resorting to criminal abortion. The paper was discussed by Drs. Barclay, Kieffer and Morris.

#### MEETING OF DECEMBER 16TH.

Paper, "Congenital Dislocation of Hip, with Report of Cases," by Dr. Nathaniel Allison. He said that thirty years ago this was considered an incurable deformity, but with methods now used there were very few cases which could not be greatly benefitted and from thirty to forty per cent. cured. The method first used was an apparatus with prolonged extension; the result, a small per cent. of cures. Next the cutting operation with a larger per cent. of recoveries, but the method now given preference is that of manipulation as practiced by Dr. Lorenz, and which gives the largest per cent. of cures. This treatment should always be given the preference, and the cutting operation only resorted to after failure of repeated attempts at reduction by manipulation. A partial reduction by manipulation gives a more useful limb than an anatomical reposition with ankylosed joint, which so often follows the cutting operation. He thinks the cause of such a large per cent. of unsucces-

ful cases is the lack of attention to the after-treatment, the head of the femur being allowed to slip out of the acetabulum after it had been replaced. These cases should be kept in plaster of Paris bandages for six months after reduction. The doctor reported eleven cases, seven of which were double, with fifty per cent. cured. He illustrated his paper by showing a number of radiographs taken before and after treatment, and the pelvis of a child who had a congenital dislocation of hip.

The paper was discussed by Drs. Hoffman, Steel, Kieffer.

Dr. J. Y. Brown presented specimens removed by operation, from two cases of acute appendicitis. He stated that this is always a surgical disease, and advised early operation in all cases. While there is still quite a difference of opinion between the surgeon and the internist in regard to this subject, the one saying always operate and early, the other claiming that the majority of these cases will get well without operation, the difficult point to decide, is, which cases will recover without operation and which cases must be operated on, we probably have no better rule to go by than this—the cases demanding operation inside of 24 hours from the commencement of the attack are exceptional, but a case which is not practically well at the end of that time should be made the subject of operative interference.

#### MEETING OF DECEMBER 23RD.

In a paper entitled "Medical Observations in the Far East," Dr.

Mary H. McLean gave a very interesting description of medical practice as she observed it in China, Korea and Japan.

I. E. GRAHAM, Reporter.

## ST. LOUIS COUNTY MEDICAL SOCIETY.

Dr. H. G. Wyer, President.  
Dr. H. T. Randle, Secretary.

The St. Louis County Medical Society met in the office of Dr. John Pitman, at Kirkwood, on November 15th. The president, Dr. Wyer called the meeting to order. The following members were present; Drs. Wyer, Randle, Armstrong, Higgins, Thurman, Forsythe, Guibor Douglas, Pitman, Dunnivant, Cape Townsend and Moore.

The minutes of the last meeting were read and approved. The committee on circular letter not being ready to report was granted further time. The committee on banquet for the December meeting reported having made arrangements to meet at the Mercantile club in St. Louis. The report was accepted and the committee was empowered to complete final arrangements. The committee appointed to draft new by-laws reported and the report was filed for action at the next meeting.

Dr. R. C. Forsythe read a paper on "Polymastia." Dr. Moore reported a case of fracture of the cervical vertebrae and presented a specimen of same.

Dr. Forsythe's paper was as follows:

## POLYMASTIA.

Supernumerary breasts as observed by the general practitioner are more a curiosity than an abnormality requiring medical or surgical interference. However there are certain points to be considered in their relationship to the body, their similarity to other conditions, and the discomfort they may cause either by their position upon the body or the psychical effect on the individual.

Julia, the mother of Alexander Severus, was surnamed "Mammæ" because she had supernumerary breasts. Anna Boleyn, the unfortunate wife of Henry the VIII of England, was reputed to have had three breasts. Diana is portrayed with numerous breasts, indicating her ability to look after the growing child. Rubens pictured a woman with four breasts.

Although the term polymastia means multiple breasts, it is used to cover the whole field of misplaced breasts and is not confined only to multiple developed breasts.

When the supernumerary breasts are developed, they generally appear in pairs, their site being below the normal breasts and somewhat nearer the median line. Next in frequency, near the axilla. In unilateral cases, the left side of the body is more frequently chosen. Two cases of supernumerary breasts on the back, two on the shoulder with nipples, one upon the epigastrium, one upon the thigh, one upon the labia majora, have been reported respectively by

Klobs, Hirst, Leichtenstern, Roberts and Hartung. Supernumerary glands may vary widely, from a small mole that may be overlooked, to a fully developed organ.

Roth reports a case in a mulatto where the third breast was six inches across in diameter, provided with nipples and areola, yielded milk, and the functional activity did not cause distress. Lynceous reports a case of a woman with four breasts in two vertical lines, and which gave milk abundantly. Gardner and Hare report similar cases where the glands were located in the axilla. Heredity seems to play a small part. Alexander reports a case of a mulatto with six nipples in a vertical line four inches apart. The patient's mother was reported to be malformed in the same manner, and several brothers and one sister had four breasts, but this was not confirmed. In Jusicu's case of three breasts, one in the groin functionated; the mother had three breasts on the chest. In Robert's case the breast was on the side four inches below the trochanter. Jenner reports a similar case. Neugebauer found ten glands on one person.

Contrary to popular opinion, polymastia is a frequent abnormality. Bruce, in the examination of 4,000 cases, male and female, found 67 cases of supernumerary breasts, or one and one-half per cent, and according to his paper males are often affected than females in proportion of four to one. But these statistics are opposed by the analysis of

Godfrain and other observers. The rate of occurrence of the abnormality of the breasts is placed at one in five hundred (Leichtenstern). Mulattos and negroes are oftener affected than the white race.

During my service at the St. Louis Female Hospital, where I had under observation over five hundred cases of pregnant women, I never met with the abnormality. Recently I have had two cases in a short time.

On Sept. 14, I delivered Mrs. C. at full term; confinement normal throughout. On the second day of her confinement, she complained of a painful lump above the right breast. On examination, I found a sausage shaped tumor about 4 inches long, extending from above the upper and outer quadrant of the right breast, along the border of the great pectoral muscle. The affair was firm, elastic, covered by normal skin, freely movable and painful to the touch. My first impression was that I had to deal with a fatty tumor, so much did the mass resemble it. Careful inquiry excluded any lymphatic enlargement. The day following showed a fluctuating mass, still painful and swollen. On massaging the breast the tumor disappeared only to reappear when the breast became distended, and then it only caused slight discomfort. Careful palpation did not reveal any connection with the normal breast. Recent examination shows all tissues to be soft and no swelling present.

Mrs. W. referred to me last May by Dr. Frank Glasgow. Examina-



tion then showed pregnancy advanced to the fourth month. About September 12th she came to my office complaining of a lump under her left arm. Examination showed a hard mass, the size of an egg slightly movable, painful to the touch and covered with reddened skin. No local cause could be assigned nor was there any evidence of a recent infection. I remained in ignorance as to the true nature of the affair until the third day after her confinement, (Oct. 20), when the mass became greatly distended, with the advent of milk in the normal breasts. It extended from above the left breast under the border of the pectoralis major muscle high into the axilla and causing the arm to be raised at an angle; it was freely movable, firm and elastic in the lower part, fluctuating in the upper part, tender, and covered by reddened skin. Had I not seen the other case, I would have opened the fluctuating mass. This tumor did not disappear upon nursing or massaging the breast, but in a few days became softer and gave no trouble. Careful palpation revealed fibrous tissue extending nearly to the outline of the normal breast, but I could not be sure of any direct connection with the normal breast tissue.

My associate Dr. Pitman related the following case to me: Last August, he delivered Mrs. G.— and on the third day a large fluctuating mass appeared under her left arm, which disappeared when the child suckled, only to re-appear when the breasts

again filled up. This was her third confinement, and in the two previous ones she had the same mass under her arm. In none of the cases could any hereditary history be obtained.

Craighill Baltimore reports a case with a tumor under each arm, the size of a lemon, and the tip surrounded with areola which felt like ordinary gland tissue.

Fuller (Extract). Author states that elevations without nipples should give suspicion of mammary glands. Cites the case of a married woman twenty-two years old who consulted him in the early part of her pregnancy, about a small swelling under each arm. When she was delivered the swelling under the left arm resembled a normal breast, and during lactation was more enlarged. On the right side, when the child would suckle the tumor would disappear. The mass on the left side was aspirated and milk found.

Hirst (Extract) "In a certain number of cases, I have seen a swelling appear in both breasts of a puerperal woman, which closely simulates an abscess, but is caused by the formation and retention of milk in accessory mammary tissue, placed in that locality.

These swellings are painful, tender to the touch, covered with normal or pink skin, and often divided in two parts by a sulcus. They may show a distinct fluctuation, and the first time I observed the swelling I came near plunging a bistoury into them, but by means of a hypodermic syringe I satisfied myself that they

contained only pure milk; in spite of the most careful palpation I have not been able to feel any connection between them and the mammary gland. I have never seen them suppurate."

Of the greatest importance is a differential diagnosis between partially developed glands, situated in a locality, often the site of lymphatic glandular swellings and other disturbances, whence confusion may arise. A careful study of the history of the case, the absence of general lymphatic disease, the absence of any avenue of recent infection will suffice to exclude lymphatic glandular disturbance.

Milk retention is differentiated from abscess formations by the absence of heat, etc. If any doubt should arise aspiration will settle the question. In no way could a galactocoele be confounded with this condition, unless seen late. It is well to remember that nearly all misplaced gland tissue functionate in part during lactation.

*Treatment.* — These conditions when found, should be let alone, unless by their position they cause disturbance to the normal functions of the patient. When the patient is physically affected, removal is justifiable. Should the milk retention cyst become infected it should be opened and drained as is done in any other abscess.

#### MEETING OF DECEMBER 13TH.

The annual meeting and dinner of the St. Louis County Medical Society was held at the Mercantile

Club, St. Louis, Wednesday evening, December 13th.

The following members were present: H. G. Wyer, Hinton Armstrong, Harry B. Gneensfelder, Fayette C. Ewing, Howard Carter, C. L. Armstrong, F. E. Guibor, S. H. Reynolds, W. L. Townsend, L. W. Cape, H. T. Randle, O. W. Koch, N. N. Jensen, J. C. Gallagher, J. M. Berry, E. J. Thurman, R. B. Denny, R. D. Moore.

The society was honored by the presence as guests of Dr. C. M. Nicholson, Secretary of the Missouri State Medical Association and Drs. R. M. Funkhouser and S. B. Brosard.

After an enjoyable dinner the society was called to order by President Wyer. Minutes of previous meeting were read and approved.

The report of Committee on Revision of Constitution and By-laws was read by the chairman, Howard Carter, it being the pleasure of the society to hear each section and article read and approved separately. The new Constitution and By-laws, presented by the Committee, are in accord with those promulgated by the State Medical Association for County Societies. They were practically adopted as read, a few exceptions being laid over to be considered at next regular meeting. The society received the application for membership of Dr. Brossard of Maplewood.

Election of officers followed: Howard Carter, president, F. E. Guibor, vice-president; R. D. Moore,

secretary and treasurer.

The scientific program consisted of a paper by R. D. Moore entitled, "The Patent and Proprietary Nostrum Evil."

Dr. Moore stated that his paper was chiefly a collection of editorials taken from various medical journals, with a few remarks and suggestions sandwiched between. He called attention to the work being done in exposition of patent medicine frauds by S. H. Adams, in *Collier's Weekly* and Wm. Bok, editor of *The Ladies' Home Journal*. (See December issue MISSOURI STATE JOURNAL). While the work is greatly appreciated and endorsed by the medical profession at large, we must, before we can consistently wage war, eradicate the nostrum evil, which has flourished in our midst, fostered and upheld by a mercenary medical press. There is practically little difference between the nostrums exploited to the laity by the press, always ready to grab such advertising, and that advertised to physicians in medical journals. The essayist spoke of the work done by the Council of Pharmacy and Chemistry of the American Medical Association, its origin, purpose and result of its investigations as published in the *Journal of the American Medical Association*. The council is something more than a body to which to refer matters regarding the ethical character of medicines offered for advertisement. Its object is to investigate all medicinal preparations that are offered to the medical profession, and to approve

those that come up to the standard acquired by its rules.

It proposes to publish in book form annually a list of preparations not in the U. S. Pharmacopeia that are approved by the Council. If you have sufficient confidence in the Council to accept results of its work in the book "New and Non-Official Remedies," one may have a ready reference book for medicines worthy of patronage and non-secret in character. The report on the acetanilid mixture was read (See *Journal American Medical Association*, June 3rd, 1905).

The publication of several advertisements in the JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION, appear to be not in accord with resolutions adopted by the State Association at the last meeting. Several preparations are advertised, printing an indefinite formula, a negative formula or none at all. The remedy necessary to eradicate this evil lies with the physician himself. The teaching of pharmacognosy and pharmacy in most medical colleges is not as thorough as it should be. Graduates should have a better knowledge of prescription writing.

If the U. S. Pharmacopeia was carefully studied there would be less proprietary medicine prescribed. It is not only lowering professional dignity, but is an injustice to patient to prescribe for him some preparation whose formula is partially or entirely unknown. Nostrums should be replaced by strictly ethical prescription writing, with mutual ben-



efit to all concerned.

#### DISCUSSION.

Dr. R. M. Funkhouser agreed with the writer and spoke of objectionable advertisements appearing in the daily papers, such as "Lost man-hood, self-abuse, monthly regulators, venereal diseases, etc." in violation of Revised Ordinance, 1892, sec. 988, City of St. Louis (See JOURNAL MISSOURI STATE MEDICAL ASSOCIATION, December, 1905, page 346). He understood this matter was being investigated by legal authority for the St. Louis Medical Society.

Dr. C. M. Nicholson stated that several of the advertisements in the STATE JOURNAL referred to and criticised, had been considered by the publication committee, and that every remedy the formula of which was not known and printed in advertisements, had been ordered excluded from the advertising pages and would not appear after the expiration of contract.

Before adjourning, the following resolution was adopted: Resolved, That members of the St. Louis County Medical Society will not prescribe proprietary medicines, except those approved by the Council of Pharmacy and Chemistry of the American Medical Association, and will use instead medicines authorized by the U. S. Pharmacopeia.

R. D. MOORE, Reporter.

#### SHELBY COUNTY MEDICAL SOCIETY.

Dr. D. R. Corbin, President.

Dr. J. S. Montgomery, Secretary.

Shelby County Medical Society met in the office of Dr. Vaughan at Shelbina on December 19th.

Dr. Vaughan reported a case of asthma very successfully treated with adrenalin.

Dr. Dallas read a very interesting paper on skin grafting and described the technic used by him in a recent case of severe burn of large area. He said the first case he ever saw was done with much ceremony, a great display of paraphernalia and many assistants. In the case described by him he had treated the patient and placed the grafts without assistance and had obtained a good result. Grafting, he said, should always be done when a large area of skin had been burned or where a deformity was likely to result from injury.

The secretary was instructed to communicate with the state board of health and ascertain what steps are necessary in the proper procedure against certain itinerants who visit the county.

The time of meeting was changed from 8 p. m. to 10 a. m. Dr. R. E. Maupin and Dr. Singleton were elected to membership.

The following officers were elected

to serve during 1906: President, L. W. Dallas, Hunnewell; vice-president, J. D. Smith, Shelbina; secretary, A. M. Wood, Lentner; censor, R. E. Maupin, Shelbyville; delegate, Chas. Chapman, Shelbina.

This was one of the best meetings of the year, there being over one-half of the physicians in the county in attendance. After adjournment the members were tendered an oyster supper given by the ever generous and hospitable physicians of Shelbina.

A. M. Wood, Reporter.

### STODDARD COUNTY MEDICAL SOCIETY.

Dr. R. C. Corbin, President.  
Dr. John Ashley, Secretary.

The Stoddard County Medical Society met in regular session in Dowd's Hall at Dexter, on Wednesday, December 6th. The meeting was called to order by the president, the following members being present: Drs. T. C. Allen, John Ashley, L. Burris, D. R. Corbin, John Douglas, S. M. Evans, A. D. Hill, H. LaRue, Ed Moore, Geo. W. Vernon, T. B. Wingo and S. M. Winters.

The afternoon session was devoted to routine business and the election of officers for the ensuing year. The board of censors reported favorably on the application of Dr. Samuel West, of Idalia, and he was elected to membership. Several communications were read and either placed on file or referred to committees for

action at a future meeting.

By unanimous vote it was decided to meet bi-monthly in future instead of quarterly. The dates of meetings will be the first Wednesday in January, March, May, July, September and November. The next meeting will be held in Bloomfield on January 3rd, 1906.

The election of officers resulted as follows: President, T. C. Corbin; vice-president, S. M. Winters; secretary, John Ashley; treasurer, S. M. Evans; reporter, Geo. W. Vernon; board of censors, S. M. Evans, one year, H. LaRue, two years, Ed Moore, three years.

Dr. Wingo, chairman of the committee on public health and legislation, reported progress and stated there was still much work for the committee to do before the desired ends could be accomplished.

At 6:30 p. m. the meeting adjourned and the visiting members were entertained at the "Jeffersonian" where a dinner had been prepared by the local members.

At 8 o'clock the society reconvened. Dr. Corbin reported several interesting cases of diphtheria. One of the patients died before a supply of antitoxin could be obtained but all the others recovered under treatment with antitoxin. A general discussion of diphtheria was then opened and most of the members took part.

Dr. Phillips was on the program to read a paper on Whooping Cough, but he was prevented from attending the meeting. Dr. LaRue

opened a general discussion on this subject and all of the members spoke of the disease and their experience in the treatment. It was generally agreed that fatalities in whooping cough were not due so much to the disease itself as to the complications; that careful nursing and suitable treatment to prevent complications were the most important features in the care of these cases.

GEO. W. VERNON, Reporter.

### VERNON COUNTY MEDICAL SOCIETY.

Dr. E. A. Dulin, President.  
Dr. T. B. Todd, Secretary.

At the annual meeting of Vernon County Medical Society, which was held on December 5th, the following officers were elected: President, E. A. Dulin, Nevada; vice-president, J. L. Truex, Milo; secretary-treasurer T. B. Bond, Richards; censor, J. Robt. Buchanan. Drs. Bohanon Buchanan and Jarvis were appointed as a committee on public health.

### RETIRING ADDRESS OF THE PRESIDENT.

Gentlemen: This meeting closes the first year of this society, and its acts have passed into history. While the advantages gained and the permanent good accomplished may not appear to us lavish and abundant, I hope it is the beginning of an effort that will unite and elevate our profession in the county to that exalted position it deserves. In 1901 and 1902 the American Medical Assoc-

ciation made provision for the organization of county societies, making them the basic unit from which all other societies are derived, making the eligibility of membership in state and national association depend upon membership in the county society, thus placing the possibility of individual membership in all societies in the hands of members of the profession with whom he associates and who are best acquainted with him professionally, intellectually and morally. If the county has within its limits doctors who are immoral or unethical, (as most counties have) their association with the honest, fair dealing doctors of their immediate vicinity, who are, I am glad to say, always largely in the majority, will either cause them to better their ways or stay out of organization and thus mark them both to the profession and the world at large.

You will occasionally find a man in active practice, with a good medical education and a goodly amount of natural ability and intelligence who can, and will do more to bring about discord within, and reproach upon the profession of which he is classed an honored member, than will the three card monte man or bunco steerer on civilized society; and I have not in view the irregular christian scientist, the magnetic healer or the bone doctor or any of that like; but the fellow who ought to be your neighbor, to work and operate harmoniously with you, increasing your confidence in every



member of the profession that he may engender a little for himself. But he takes advantage of every opportunity to speak sneeringly of you and volunteers information as to your lack of natural ability and scientific training. Or he meets you in consultation, heartily agrees with you and the method of treatment then takes the first chance in private to express doubts as to the advisability of continuing the treatment and intimates that it was about as much as could have been expected of you with your limited amount of knowledge any way. The doctor who will prostitute himself and the profession to which he claims to belong by doing the practice of well to do and influential families in a neighborhood at a reduced rate or as it is sometimes done for nothing, in return for their efforts in drumming him up a practice, is pretty well on a level with the one who tries to make capital out of all his cases by magnifying the condition and impressing upon the friends and relatives that he "was sent for just in time" and that it was most important that they sent for him instead of any one else as he alone was in possession of the peculiar and specific remedies to exactly reach the case, and then encourage the interference of some long tongued woman to interfere with his neighbor in the next case until she gets the attending physician in his place and pompously poses as the only doctor worthy of the name in the neighborhood, congratulates the friends on their good fortune in

calling him when the patient gets well and lamenting that he was not called sooner if he dies.

When a doctor ventures to speak sneeringly or lament the lack of scientific training of another to the public he is dealing with a proposition that will sooner or later reflect upon himself for the reason that all have their friends and all receive their rights and privileges to practice from the same source and that is about as far as the ordinary citizen can judge, the community viewing the matter without prejudice can't see a very great amount of difference and the doctor originating a controversy of this character in his community is very likely to get the worst of it before he is through. The hypocrite who agrees in consultation with you and takes advantage of the first opportunity to express doubt as to your course of treatment and scientific ability, may for a short time catch a few unimportant cases, but the intelligent, worthy, honest layman will see through the veiled subterfuge and both will likely fall in his estimation and there will possibly be a doubt planted against the whole profession. The doctor who will barter or trade his professional duties for drumming service places a very low estimate upon it and one that he can not blame the people for adopting. And they will not be slow in arriving at that conclusion and place the same value upon all his services and possibly that of all the profession.

As for the doctor who tries to im-

press his clientele in successful cases, that he was called just in time, or in fatal cases leave the impression that he was called too late and things might have been better had he been called a few hours sooner or even attempts continually to magnify his importance by enlarging upon the gravity of his cases and his special adaptation to those particular cases, his ability to treat them in a superior manner has adopted methods so transparent that it is soon observable by an intelligent community and are the most unbecoming acts a doctor can be guilty of except it be the one who succeeds a respectable competitor in a case and tries to impress upon them the serious mistake they made in not sending for him first. These peculiar characteristics whether adopted by a great number or just a few in a community, in that proportion effect the profession, limits the confidence and lowers the standing of its members.

The medical profession as an organization is like all other organizations, the closer the association of members in the same localities the better can you attain and accomplish ends desired. It has been said, and I will not stop here to deny it, that all doctors are possessed with these faults, many to a limited, and a few to a great extent. If that be true, the association of the many who are personally acquainted with each other's weaknesses, with an honest desire in their hearts to elevate and better their condition will

not only succeed as to themselves but have a most wholesome effect on the few. I do not understand that these associations are to read scientific papers and study clinical cases alone, but to bring about a closer communion, afford the opportunity for cultivating a better acquaintance and unified effort to accomplish desired ends. The county association gives these opportunities, admits of our studying each others peculiar characteristics, lop off our faults, add to our virtues and thus, possibly grow into our ideal of what an honest, high minded, dignified, popular physician should be. Now there are about 56 physicians in Vernon county in active practice out of which 19 have joined the association. Every one in the county should be a member. I have written to many and talked to quite a number soliciting them to take membership and I hope in time all will see the great advantages of cooperation and fall in. Now in surrendering my position as president of the association I tender you my most grateful thanks for your efforts in trying to make it a success. As we move along, no doubt many conditions and propositions will present themselves that by united effort may be moulded to our advantage and interest without working any hardship upon the community. As we become better acquainted with each other we will understand our wants, desires, privileges and just demands and therefore be better able to cooperate. I would suggest that the incoming of-

ficers appoint three members in different parts of the county to make special effort in soliciting membership, explaining the advantages of association together and that special effort be made during the coming term to enlist every reputable member of the profession in the count. Again I thank you for the honor and hearty support you have given me.

Respectfully,

H. C. JARVIS.

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### WORTH COUNTY MEDICAL SOCIETY.

Dr. O. P. M. Mills, President.  
Dr. J. K. Phipps, Secretary.

The Worth County Medical Society met at Grant City, December

13th, the president, Dr. O. P. M. Mills, in the chair. The minutes of the last meeting were read and approved. Members present: Drs. J. T. Smith, A. C. Long, W. E. McKinley, W. A. Robertson, H. P. Mills, O. P. M. Mills and J. K. Phipps.

This being the annual meeting the following officers were elected for the ensuing year: President, O. P. M. Mills; vice-president, N. P. Nesbit; secretary-treasurer, J. K. Phipps; delegate, W. E. McKinley.

On motion it was decided to have a banquet at the next regular meeting on January 10th, and invite some speaker of ability to be the guest of the society. All members of the profession in the county are invited to be present at the meetings.

J. K. PHIPPS, Secretary.

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## NEWS ITEMS.

Dr. A. J. Detweiler, bacteriologist to the state board of health, has resigned. He has moved to Hannibal where he will enter general practice.

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Dr. S. P. Budgett has resigned the chair of physiology in Washington University and removed to California. Dr. Albert E. Taussig is filling the position temporarily.

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The Alkaloidal Clinic makes announcement that, with the beginning of a new volume in January, the

name of the journal will be changed to the *American Journal of Clinical Medicine*. The journal will remain under the able editorial management of Drs. Abbott and Waugh.

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NOBEL PRIZE AWARDS.—The Nobel prizes, each amounting to about \$40,000, were distributed by King Oscar, at Stockholm, on December 10. The list includes the following: Physics: Philip Lenard, Professor at Kiel University, for researches into cathode rays. Chemistry:



Adolph von Boeyer, Professor at the University of Munich, for researches leading to the evolution of organic chemistry and the development of chemical industry. Medicine: Professor Robert Koch of Berlin, for researches on the prophylaxis of tuberculosis. Literature: Henryk Sienkiewicz.

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A building permit has been issued to the St. Louis Medical Society, authorizing the erection of a one-story auditorium on ground leased from the St. Louis Medical Library Association at 3525 Pine street. The structure will be 44x52 feet, and will cost \$7,000. Under the contract the building must be ready for occupancy by June 1st, 1906. This will make a splendid home for the society.

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The crusade of the St. Louis Medical Society against patent medicines and quack advertising is beginning to bear fruit. A few days ago Dr. Nathaniel King was convicted in a police court of publishing indecent medical advertisements, and fined \$50 and costs. Not one of the daily papers in St. Louis published the facts. The public should know how our great daily papers, for a few dollars, are willing to become party to, and aid in these great frauds. "The Mirror" was the only publication to take any notice of the case.

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A number of druggists have been victimized recently in St. Louis by a man who gave bogus checks and impersonated a physician. The

scheme followed by the man was to rush into a drug store, write a prescription hurriedly and ask to have it filled quickly. Then he would write a check, say he was Dr. Blank, and as the medicine was needed at once and he would take it with him. He would then give a check for \$10 signed by the name of the physician he was impersonating and receive the balance in cash. The man was evidently familiar with prescription writing and succeeded in having several checks cashed by druggists.

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ST. LOUIS OBSTETRIC DISPENSARY. —On December 14, 1905, the St. Louis Obstetric Dispensary was formally opened in its new quarters at 711 Carr street. This institution was founded in October, 1904, under the auspices of the St. Louis University and is at present maintained with funds provided by a Ladies Auxiliary Board, of which Mrs. Seth W. Cobb is the president and Mrs. A. V. Reyburn the treasurer.

A medical report just published by the physician in chief, Dr. Hugo Ehrenfest, analyzes the work done by the dispensary during the first thirteen months of its existence. Assistants and senior students on regular duty at the dispensary attended to 166 labor cases. In a speech made by the Health Commissioner, Dr. Snodgrass, during the opening ceremonies, the interesting fact was emphasized that this represents 1.4 per cent. of all confinement cases reported to the health authorities of St. Louis during the past year.

This fact certainly justifies the optimistic views expressed by all the speakers during the ceremony concerning the future of the St. Louis Obstetric Dispensary.

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Preliminary programme of the tours of the American party attending the Fifteenth International Medical Congress to be held in Lisbon, in April, 1906.

As a large number of American physicians will attend the Fifteenth International Medical Congress, to be held in Lisbon, Portugal, April 19 to 26, 1906, the following itineraries have been arranged to enable the journey to be made with the maximum of comfort and enjoyment, at fixed inclusive fares. Tour A provides for a direct trip, with short visits to Seville and Gibraltar, in addition to the stay in Lisbon during the session of the Congress. A tour of 33 days. Inclusive fare \$300.00.

Tour B presents an opportunity of enjoying *en route* the beauties and attractions of some of the most interesting cities of Spain, rich in Moorish remains, and a visit to Tangier, the fascinating chief seaport of Morocco. Inclusive fare \$450.00.

Additional security, and consequently added pleasure, will be obtained by thus traveling as an associated party, with a conductor thoroughly conversant with the route, languages and customs of the countries to take charge of the details of travel.

The business arrangements of the tour have been placed, as before, in the hands of Thos. Cook & Son, the well-known Tourist Agents, which insures perfect and complete service for the trip, and relieves passengers from all troublesome details incident to foreign travel. Those delegates who attended the last Congress in Madrid, sailing from New York on the "Prinzess Irene" will remember the excellent service afforded them.

Dr. John H. Musser, Philadelphia, is Chairman of the National American Committee, and Dr. Ramon Guiteras, 75 West 55th street, New York City, is the Secretary, to whom all applications for membership in the Congress, and communications in regard to the presentation of papers should be addressed.

To Secure Membership.—Persons desirous of joining a party should send a New York draft or postal order for twenty-five dollars each, made payable to the order of Thos. Cook & Son, 261 Broadway, New York, who will at once return a Deposit Receipt, and a plan of the steamer, showing the location of the staterooms or berths allotted. Care should be taken to mention clearly which party the applicant desires to join. The full name and address of each person must also be given for registration.

The balance of amount due for membership is payable not later than three weeks before the departure of the party from New York.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

Volume II

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Number 8

## ORIGINAL ARTICLES

### RECURRENT ZOSTER AND NEURALGIC REPEATING HERPES.

By JOSEPH GRINDON, M. D., St. Louis.

That zoster as a rule occurs but once in a life time has been known from early times. Rare exceptions were occasionally recorded, but no attempt was made to collate or classify them, or to inquire into their causes, until twelve years ago when I read a paper on the subject before the American Medical Association.<sup>1</sup> This paper contained a synopsis of sixty-one cases, all but a few collected from the literature of the subject. These were all that I could find after a diligent search commencing with the earliest records. Even of this number there were some that, as I now believe, should not have been included. Thus, cases II, III and IV may be rejected as being perhaps only cases of obstinate consequent ulceration, not a rare phenomenon, and one having little in common with recurrence of the original eruption. Dr. Duhring has assured me that the case designated in my list as case VII and reported by him as "dermatitis vesiculosa neuro-traumatica of the forearm" was es-

entially different from zoster, a statement which I necessarily accept. I had included it on account of its presenting several points in common with Kaposi's atypical hysterical type. Case VIII, described by Galton as "traumatic neurosal pemphigus" is also open to objection, as I admitted in my original article. These comments also apply to case XII (Bayet)' "bullous and gangrenous recurrent lesions on hands and knees," and to case XXXIII, Kaposi's "pemphigus neuro-traumaticus." Case VI (Milton's) may have been one of simple relapsing herpes, although there was scarring. Of case XXXVI (Mackenzie). "multiple symmetrical zoster," I said, "I question whether it was in any sense a zoster." The last six cases in my list belonged to Kaposi's "zoster gangrenosus recidivus atypicus hystericus." and were introduced with the remark that "the cases constituting this type . . . present many marked points of difference which separate these from other zoster or zosteroids. and justify their being placed off by themselves as a separate clinical if not pathological

<sup>1</sup>Read by title at the meeting of the Missouri State Medical Association, Excelsior Springs, Mo., May, 1905:



entity." They were included for the sake of making a full presentation of the subject, but this later study will gain in clearness and usefulness if limited to fewer and more simple types.

This leaves forty-six fairly characteristic cases, to which I can now add three personal cases, nine culled from reports published since 1893, and one earlier report which I had before overlooked.

In my first article I arranged the cases as follows (now omitting the Kaposi type):

Group 1. Chronic zoster (overlapping recurrences).

Group 2. Recurrences several or frequent.

Sub-group A. Frequent recurrences at same area.

Sub-group B. Several recurrences at varying sites.

Sub-group C. Several recurrences at the same and again at a distant site.

Sub-group D. Several recurrences, sites not definitely stated.

Group 3. Single recurrences.

I shall here follow the same classification. Nine of the additional cases belong to group 2.

*Group 2, sub-group A.* "Frequent recurrences at same area." Case 1. Leloir<sup>2</sup> (Quoted by Besnier and Doyon, overlooked in writing my former article). A vigorous physician of sixty-three, has had for several years, a vitiligo which has successively invaded the genital organs, trunk, limbs and face. When seen by Leloir he was suffering from a left intercostal zoster of the most classical type, being the tenth attack of its kind.

Case II. Matignon.<sup>3</sup> Young soldier, has had recurrent ophthalmic zoster from childhood, three or four times a year. Each attack is preceded by fever and the general phenomena of true zoster.

Case III. Beatty.<sup>4</sup> Man, aged followed by vesicles on the scrotum and between some of the toes, in July, 1894, February, 1895, May, 1895, December, 1896, April, 1897. Intervals from three to nineteen months.

Case IV. Hirtz and Salomon.<sup>5</sup> Man, aged sixty-seven. Alcoholic. Pain and eruption right buttock and thigh, July, 1901. Former history: In 1895, similar attack, and since then each year in January or February. Sciatic and crural nerves tender. Last recurrence February, 1892, five patches on right buttock and two small ones on left. (This was also, therefore, *quoad* the last attack, an example of bilaterality).

Case V. Reichman.<sup>6</sup> "Herpes zoster menstrualis sacro-lumbaris." Woman, aged thirty-five. Syphilis at nineteen. Recurrence (oral lesions) at thirty-three. Menstruation appeared at twelve, always scanty. For the last ten years, from the age of twenty-five on, there have regularly appeared at each menstrual epoch, vesicles preceded for two or three days by burning sensations, and disappearing in eight to ten days. In September, 1900, the group observed was the size of a silver dollar. In November of the same year the eruption for the first time was symmetrically distributed, but the next two manifestations were on one side only. (Mark the tendency to even-

tual bilaterality.

Case VI. New personal observation. Man, sixty, musician. Well advanced interstitial nephritis. For the past twelve years a group of vesicles on a reddened base, the size of a silver half dollar, has appeared once a year, preceded by neuralgic pains, always at identical spot.

Case VII. New personal observation. Physician, aged fifty-one, of excellent health and robust frame, has had for the last fifteen years, three times a year, a crop of vesicles the size of a silver half dollar, always at an identical point on buttocks, preceded by neuralgic pains.

Case VIII. New personal observation. Clerk, aged forty, general health good, has had for the last six years, once a year, a crop of vesicles the size of a silver half dollar, always at an identical spot on the buttocks, preceded by neuralgic pains.

*Sub-group C.* Case IX. Pernet.<sup>7</sup> Woman. Right intercostal zoster in December, 1891. Group of papules passing into vesicles, below right angle of lower jaw, preceded by neuralgic pains in right side of head in December, 1892, February, 1896, and November, 1896. This case could practically be included in the last group.

Case X. Winfield.<sup>8</sup> Man, aged thirty-five. Single recurrence of zoster. Four years earlier a left intercostal zoster. Aestivo-autumnal fever the next three years. Present attack, right intercostal, preceded by return of malaria. Severe neuralgia. Cervical adenopathy. Crescentic parasite in blood.

*Not classified.* Cases XI, XII, and XIII. Fabre. "Four clearly

defined, recurrent cases out of two hundred and seven zosterers." (One of these I cited in my former article as case XLI).

Of the fifty-nine cases now serving as material for study we may group together two of the eight (six being dropped as explained above) originally classified by me as chronic zoster (since overlapping crops only differ in the time-factor from those that are successive), twenty-two of the twenty-three in sub-group A, and the second to the ninth cases inclusive, detailed in this paper, making thirty-two in all, or 55 per cent of the whole, without reckoning Fabre's "other cases" of unstated number, referred to later. The other twenty-seven cases, while full of interest, do not group themselves so naturally as to facilitate generalizations. Let us, then, more closely examine this group of thirty-two cases.

We find that the proposition enunciated in my first paper, of the coincidence of the phenomena of frequent recurrence and of recurrence at the same site, remains unshaken. Bilaterality, most rare in other forms, is present in seven out of twenty-four cases of the former series, and in cases IV, V and IX of this communication. Extension to contiguous nerve areas on the same side occurs rarely. Two cases in the earlier series ultimately extended from one trigeminal branch to another, but not to another nerve area. Preceding or accompanying simple herpes is noted in a few of the cases.

Of the thirty-two cases, nineteen (Nos. 1, 9, 10, 11, 14, 15, 18, 19, 24, 25, 29, 30, 31 of the former series, and Nos. 2, 5, 6, 7, 8, 9 of the present)



may be considered to form a smaller class by themselves. In three of the first list, however, details are not given. This leaves sixteen cases, to which I will now more particularly call attention. They are characterized by the *frequent* recurrence of a *single*, usually *small* patch. With these are to be classed the cases mentioned (but not enumerated) by Fabre, of which he says that besides the four "clearly defined" recurrent zoster mentioned in the previous citation, he has seen others, which he would call *zona a repetition*, in which the disease, after being entirely cured, reproduces itself in the same place and at rather regular intervals, not exceeding twelve or fifteen months.

These cases form a natural group intermediate between zoster and simple relapsing herpes, such as is so common about the nares and lips, and about the genitals. They differ from true zoster in their recurrence, in their limitations to a single, usually small, patch, and in their sites of election, while they resemble that disease in the conformation and grouping of the lesions and in the preceding and accompanying neural-

gia. They differ from simple herpes in their more inflammatory appearance and deeper involvement of tissue, in the longer duration of each attack, in the usually much longer interval between attacks, in their neuralgic phenomena, and in the sites implicated (in my series, face, forearm, finger, back, shoulder, hip and buttocks), while they resemble that disease in their leading feature of recurrence.

Fabre's name of *zona a repetition* describes this type better than the term "recurrent zoster" inasmuch as each attack is not only a recurrence but an exact reproduction of those that preceded it. These cases probably correspond to Bertholle's "herpes recidivant de la peau" and have much in common except as to location, with Mauriac's "herpes génital nevralgique." Besnier and Doyon divide simple herpes into three forms: (a) herpes of the mucosa, (b) herpes of the skin, (c) peri-orbicular herpes, that found about the natural orifices. They would place the groups now under discussion in class b, with which classification I cannot agree for reasons given in the last paragraph.

In the following table are shown some of the leading features of this form:

TABLE SHOWING CHARACTER OF NEURALGIC REPEATING HERPES.

SEX	AGE	LOCATION.	DURATION.	INTERVAL	PRODROMAL NEURALGIA.
Woman...	26	Face.....	Many times....	.....	Present.
Man....	Young	".....	From Childhood..	3 to 4 months.....	"
Boy....	7	".....	6 1/2 years.....	5 to 6 months.....	"
Man....	"	".....	5 years.....	3 to 4 months.....	Not stated.
Man....	28	".....	5 years.....	12 months.....	Present.
Woman...	39	Forearm.....	13 years.....	5 to 6 months.....	"
Man....	"	".....	1 year.....	12 months.....	"
"	"	Index finger.....	2 years.....	At first 3 to 4 months, later 6 to 8 weeks.....	"
Woman... old..	"	Below scapula.....	Few months.....	Overlapping attacks.....	"
Man....	33	Shoulder.....	3 years.....	12 months.....	Not stated.
Man....	23	Hip.....	6 years.....	6 weeks.....	"
Man....	67	Buttock.....	7 years.....	7 to 13 months.....	Present.
Woman...	35	".....	10 years.....	1 month.....	"
Man....	60	".....	12 years.....	12 months.....	"
Man....	51	".....	15 years.....	4 months.....	"
Man....	40	".....	6 years.....	12 months.....	"



In only two of these (the fourth and fifth of the table) was there a history of traumatism.

The most descriptive title for these cases would be "neuralgic repeating herpes." The other recurrent cases are possibly in rare instances, a second attack of true zoster, just as small-pox or scarlatina may occur by way of exception more than once in the lifetime of an individual, or are zosteroids due to continued peripheral irritation, traumatism, pressure or nerve trunks, chronic neuritis, or

possibly, to a continuous toxæmia.—

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## CONGENITAL DISLOCATION OF THE HIP.

Report of the Ultimate Results Following the Treatment of Eleven Cases.\*

By NATHANIEL ALLISON, St. Louis.

Congenital dislocation of the hip was regarded as a hopeless deformity a generation ago. It is now looked upon as a condition which, in a majority of instances, offers no great obstacle to correction. Bradford has recently very aptly compared it to congenital club foot, and Jackson Clarke has stated that it should be classed with club foot, among curable deformities. This does not seem at all an exaggeration to one who has followed the progress made in the treatment. The great change in mental attitude from that of thirty years ago is impressive, inasmuch as we now look upon a class of cases as curable, that were abandoned thirty years ago to the life-long endurance of a most crippling

deformity. As Americans we may feel some pride in the fact that an American surgeon was the first to seriously attempt the correction of this deformity. Since his day the advance has been gradual and convincing. We owe much to the efforts of a few men who strove unceasingly to achieve the impossible. It is not my object to discuss the proportionate amount of credit that is due to Paci, or Lorenz, to Hoffa, or to Bradford. Let it suffice that due to the combined efforts of these men and others a resultant has been attained which gives assurance that the number of incurable cases is fast approaching a vanishing point. A recent report from the Boston Children's Hospital shows conclusively this transition. The results obtained in all the cases treated at that

\*Read before the St. Louis Medical Society, December 16, 1905.

institution up to July 23, 1903, are reported:

Between 1884 and 1896, 21 cases were treated mostly by appliances and prolonged traction. *Result*: Not one success.

Between 1896 and 1902, fifty-four cases were treated mostly by the open operation. *Result*: Twelve successes, 13 failures and 29 unknown results.

Between Jan. 1st, 1902, and July 23d, 1903, fifty-five cases were operated upon, mostly by manipulation. *Result*: Thirty successes, 12 failures, 13 improved positions.

Reports of similar character to this have appeared of late from the various places where much of this work is done. That there is a most gratifying increase in the percentage of successes even the most pessimistic can but agree. It is not visionary to predict that with the widespread knowledge of this deformity and the ability to recognize it early and subject it to the proper treatment, few cases will be allowed to pass the age limit set without being subjected to the measures necessary to reduction. As to the age limit, it is generally conceded that the age limit set by Lorenz is a good guide for prognostication of the result to be gained by manipulation. It is only a rule, however, which allows exceptions; for instance, the muscular development of the child plays an important role, one individual of five years may offer more resistance to forcible stretching than another individual of seven years.

As to the treatment, Bradford's comparison of this condition to congenital club foot gives in a way the

indications, i. e., in young children, simple manipulation gives a large percentage of cures; in older and more resistant cases, mechanical stretching, open operation, and osteotomy are at times necessary.

Due to a few unfortunate results the idea became prevalent at one time that the manipulative reduction of these cases is an operation of great violence and one accompanied by danger to life and limb. The results show that there were the operation is properly done such fears are groundless. Lorenz has said that it is at times "almost playfully easy" to reduce these dislocations, and it is a recognized fact that even in children of good muscular development who have arrived at the age limit, suitable preliminary treatment, such as systematic abductor stretching, or subcutaneous division of shortened muscles combined with traction, will obviate much of the force necessary at a "one sitting" reduction. The femoral head may be placed in the rudimentary acetabulum in the majority of cases without unusual danger or difficulty. Being so placed with the femur in right angle abduction—"the frog position"—the parts are held for six months by a plaster of Paris dressing—radiographs may be taken meanwhile to give assurance of the relative position of the bones. After these six months of fixation the cast is removed and we are brought face to face with the beginning of a very tedious and difficult treatment. Due to the long confinement in the right-angled abducted position the muscle group between the pelvis and the trochanter has become much short-



ened. The abductor group is usually stretched and injured by the manipulation necessary to reduction. To these we must add the anatomical changes incident to the deformity, viz., a shallow acetabulum, a deformed femoral head, changed direction of the femoral neck, and a shortened ilio-femoral ligament. All these obstacles make the return of the limb to the weight bearing, walking position a task which is liable to discouragement and disappointment both to the surgeon and the parents of the child. Relapse is liable to occur. Bi-lateral cases present more than double the amount of difficulty; the operation must be repeated at times, and even after repeated attempts, the best that can be accomplished is a transposition of the femoral head to a stable position near the defective acetabulum. These are great difficulties and incline one to the opinion that the after treatment of these cases is a consideration of first importance. However, great as these difficulties are, requiring as they do persistence and patience, we have the satisfaction of realizing in almost every case that a result of much improved function may be obtained. In a small percentage of cases repeated relapse makes it necessary to resort to open operation in order to discover and remove the anatomical inconsistency to stable reduction. Let me emphasize again the care that is necessary in the *after treatment* of this condition.

This report covers eleven cases, a sufficient period of time having elapsed to justify the claim that in almost every case the report is of

## CONGENITAL DISLOCATION OF THE HIP

No.	CASE	Age	Sex	Single or Double	Muscular Development	Complications	Shortening	Date of operation	Operation	Relapse, repeated	Present Condition
1.	A	7 yrs	F	Bilat	good		2½	April 1903	prelim stretching manipulat. reduc.		Reduction stable, no limp, no lor.
2.	B	8 yrs	F	"	fair		3	May 1903	Osteotomy		Abduction, sl. limp, lordosis less
3.	C	8 yrs	F	"	poor		1½	May 1904	Manipulation reduction	Rt side Sept 04 Lt side Jan 05	Reduction stable, no lordosis, sl. limp on right
4.	D	9 yrs	F	unilat left	good		2¼	June 1904	"	Sept 04	Transposition with stability. Gait improved
5.	E	2 yrs	F	unilat right	fair		1	June 1904	"	July 04	Unknown
6.	F	3 yrs	F	unilat left	fair		1	July 1904	"	Oct 04	Reduction stable, no limp, no lor. Function normal
7.	G	2 yrs	F	Bilat	poor		1½	Oct 1904	"	Rt side June 05	Rt. hip reduced, still some abduc.-left hip transposition, function improving
8.	H	4 yrs	F	unilat left	good		¾	Nov 1904	"	June 05	Reduction stable; no lor., no limp, normal function.
9.	I	2 yrs	M	Bilat	fair		¾	March 1905	"		Reduction stable, lordosis gone
10.	J	11 yrs	F	"	poor	Dorsal Pott's d'bl club foot	2	July 1905 Sept 1905	Osteotomy	Function returning	Union in abduction. Gait much improved.
11.	K	7 yrs	F	"	good		1¼	Oct 1904	manipulation reduction		Died of T B meningitis 4 mos after reduction



**Summary**

Eleven cases in all.	
Seven double dislocations.....	14 hips
Four single.....	4 "
Total No. of hips.....	18

**Sex**

10 girls	Single dislocation	{ 1 right side 3 left side
1 boy		

**Double Cases**

2 double cases (4 hips)	Formation of new acetabula with stability. Adduction deformity relieved by osteotomy.
1 " " (2 " )	<b>Result</b> —Great improvement. Died of tuberculous meningitis 4 mos. after operation.
3 " " (6 " )	<b>Success</b> —Reposition, on both sides with good function.
1 " " (2 " )	<b>Success</b> —One side; other side transposition.
<b>Total 7</b> " " 14 "	

**Single Cases**

1 single case (1 hip)	<b>Success</b> —Reposition, perfect function
1 " " (1 " )	<b>Transposition</b> —Improved function
1 " " (1 " )	<b>Success</b> —Reposition, perfect function.
1 " " (1 " )	<b>Unknown</b> —Slipped out twice; replaced; present condition unknown
<b>Total 4</b> " " 4 "	

**Results**

Seven double cases (14 hips)	<b>Success</b> 7 hips
Four single " 4 "	" 2 "
Total— <b>Success</b> .....	9 "
<b>Transposition</b> .....	2 "
<b>Unknown</b> .....	1 "
<b>Osteotomy</b> .....	4 "
<b>Died</b> .....	2 "
	18 "

the ultimate condition. The first two cases were operated upon by Dr. Steele and myself early in 1903. I introduce them into this report to confirm a report made by Dr. Steele at an earlier date. Much of this work is the conjoined efforts of Dr. Steele and myself and I am under great obligations to him for the

knowledge he has imparted and the kindness he has shown to me in the treatment of these cases in the making of this report.

The skiagrams illustrate the condition before and after operation. It has been frequently observed that the x-ray plate is not an exact memorandum of the functional result. For instance in case A the functional result is perfect whereas the skiagram after operation shows the femoral heads and acetabular cavities far from normal. The two cases on which sub-trochanteric osteotomy was done were cases where the femur had dug out for itself a new acetabulum and had become stable there. These cases both had adduction to the amount of standing and walking with legs crossed. The abduction gained has established a much improved gait in each case. One of these cases had as concomitant conditions, double club foot and dorsal Pott's disease.

I am indebted to Dr. Clopton for collaboration in cases 9 and 10. One of these was a boy with double dislocation. The pelvis of the child that died of tuberculous meningitis gave me an opportunity to carefully study the anatomical condition present in that individual case.

Eleven cases are not sufficient number from which to draw many conclusions. However, I feel justified, considering the range of conditions presented by these cases, in making the conclusion: that the number of cases that are beyond aid is very small: that the operation is neither difficult nor dangerous; that the after treatment is long, difficult and subject to disappointment;



Case F. Before operation. Single.



Case F. Reposition. After 16 mos.



Case C. Double  
Lordosis  
Before operation



Case J. Formation of New Acetabula



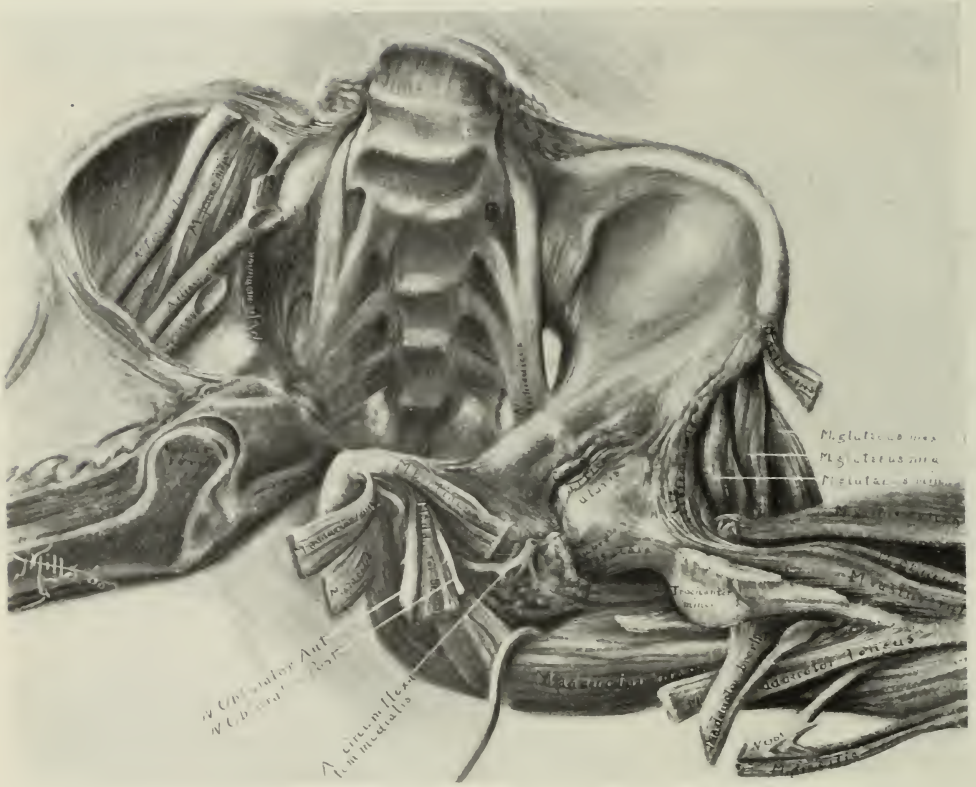
Case K. Double Lordosis  
and Adduction.  
Before operation



Case I. Double Case. Before reduction.



Case I. Double Case. Six months after reduction.



Anterior view of specimen, showing frozen section of right side and partial dissection of left side.



that an early diagnosis is of the utmost advantage to surgeon and patient.

*Demonstration of Specimen.*—This specimen is the pelvis and the upper halves of both femora—the hip articulations intact—removed from a double case that died in the fourth month after operation. The reposition was anatomical as you may see by the right side which is sectioned. I present this to you to show that even though many anatomical conditions exist in these cases, which are wide departures from the normal, it is nevertheless possible to obtain anatomical replacement. I wish to call your attention particularly to the shortness of the ilio-femoral band, and to the care necessary to prevent this ligament acting as a positive force tending toward re-dislocation.

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#### DISCUSSION.

Dr. A. J. Steele said the essayist had been extremely fortunate in having had the opportunity of examining and studying the anatomical relations of the tissues and parts in a

congenitally dislocated hip. The preparation of the dissections and the representative drawings had certainly been carefully and accurately made. The practical lessons deduced therefrom would seem to indicate that the now generally accepted method of treatment was correct. As to the term "congenital dislocation", Dr. Lewis A. Sayre thought better to call the condition a "misplacement", as he believed the head had never been in its socket, therefore could not have been dislocated. But we now do believe that in early intra-uterine life the joint was normal and that from causes, not yet clearly understood, the head was sooner or later forced out. Again there are others who would limit the term dislocation to cases occurring after birth. But the consensus of professional opinion today is in all cases to retain the old term. In any case the fact remained that the child was born with the hip out of place and the condition was not noticed until a year or two later. It is very curious why 88 per cent. of the cases occur in the female. It is one of the nuts that the orthopedist has to crack. After a number of post mortems on both male and female fetuses, possibly it may be determined just why it occurs. This condition was not always quickly recognized. Several cases had been sent to him which had been diagnosed as spinal trouble because of the extensive lordosis. In the early days when the case was correctly diagnosed the surgeon did not know what best to do. Dr. Brown, of Boston, reported about that time a case successfully treated by traction, a cure following

two or three years of continuous pull. With this report before him Dr. Steele had adopted the method in his first case. He had used uninterrupted traction for two or three years, keeping the child on her back then with straps so applied as to keep the great trochanter well down, the child was permitted to get up and walk about. In an inopportune time she went to visit her grandmother, whose misapplied sympathy took the brace off thus allowing the bones to slip up. Yet the condition was not so bad as before. That patient is now a young woman and could dance and skate and has but a very slight limp.

Two points should be considered in regard to the preliminary treatment. The matter of relaxing the muscles before the operation was very important. Unless in a very young patient the abductors should be divided, and traction made for one or two months. This overcame the resistance and the reduction became a more simple matter. Another obstacle was the capsule doubling in on itself. It was stretched and became hour-glass in shape and there remained only a small opening for the head to get through into position. For this reason Dr. Harry Sherman, of San Francisco, in all cases did an open operation. His method was to cut down on the capsule, enlarge the constricted portion, and slip the head through it into the acetabulum. He had recently told Dr. Steele that he had no bad results in many cases from this method. Dr. Steele had asked him why he did not try the manual operation first and, if not successful, then the open

operation, and he had replied that he did not want to waste time. If there were no danger of after results that might be the best, but, aside from that objection, parents were not always willing to submit a child to such an operation.

Dr. Lorenz was not to blame for the newspaper fire works that attended his visit, some two years since, but while some things that occurred about that time were to be condemned, great praise was due him for the good he did in travelling about the country and calling attention to the subject as it had never been before. Of the seven cases, (eleven hips) he operated on in St. Louis, the results were unfortunate. But two were perfectly successful. The questionable results were not to be attributed to any want of knowledge or skill on the part of Dr. Lorenz. The cases had been left to the care of Dr. Steele, without positive instructions as to what the after treatment should consist of. The preliminary treatment and after treatment were both exceedingly important.

As to the Bartlett machine, Dr. Steele had the pleasure of entertaining Mr. Bartlett and obtaining his ideas, and he has seen the work done in Boston by this machine, but the speaker did not believe it would ever come into general use. There was danger of going too far with it and doing harm.

With a thorough understanding of the normal relations of the thigh bone it became a probe in the hands of the surgeon and he knew just where to place it.

Dr. Philip Hoffmann thought the



paper one of the most important that had been presented before the society for a long time. Dr. Allison should be very proud of the result—50 percent of anatomical replacements with retention of replacement. Practically this came up to the claims of Lorenz himself. When one remembered that Ridlon but a year and a half ago collected the cases operated on by Lorenz in this country and reported as a final result but 10 per cent of anatomical repositions, or a slightly larger percentage, Dr. Allison's results certainly showed something for the advance of this operation. Doubtless the discrepancy between the early results and those of the present day was due to increased care in the after treatment. Again, Dr. Hoffmann doubted whether Dr. Allison would expect to find quite as high a percentage of perfect results in one hundred cases as in the number reported, yet the report of the Boston Children's Hospital in 1903 showed that of 33 cases, 22 were anatomical repositions with retention, and these cases were examined by good orthopedic surgeons. Hoffa, in June 1904, reported permanent replacement in 30 per cent, i. e., 75 out of 250 hips operated upon. By reposition Dr. Hoffmann did not mean that the head of the femur was merely opposite the acetabulum, but that the head was within it, in the normal position. One of the difficulties in the way of securing this reposition was the constriction of the capsule at the superior and posterior part of the acetabulum, leaving an opening in many cases smaller than the femoral head. Sherman found this condition

in twenty-seven out of twenty-eight hips in which he had done arthotomy and explored the narrow part of the capsule with his finger. It is difficult to understand how so large a percentage of femoral heads are forced through this narrow opening into direct contact with the cartilage of the acetabulum. The head, if not forced through, would, when brought opposite the acetabulum, be separated from it by an intervening fold of capsule. Lorenz' operation was first reported in 1896 and had been performed many times in this country before his visit in 1902. Though the notoriety which attended Dr. Lorenz' visit was unfortunate, yet his work here stimulated the surgeons over the country to think of this operation as they had not though before and led to development of technique in both **operation and after treatment** and to the **realization that not only** must the head of the femur be gotten into position, but that it must be kept there. Dr. Allison's specimen showed very well why redisplacement after correction might easily occur. It was a rare specimen and well worked up. A new procedure in the treatment of these cases was the mechanical reduction of the dislocation, reduction by means of the Bartlett machine, as used in the Boston Children's Hospital. By the aid of this machine one can exert a strong and exact traction and abducting force and, by means of a special plate, the trochanter can be pressed downward and forward. Lorenz' objection to the machine, that it deprived the operator of the use of the sense of touch, could be applied to almost any in-



strument used in surgery. Dr. Hoffmann thought that force could be used much more exactly by means of the machine than by the hand.

Dr. Malvern B. Clopton said that one case that showed the bad results of neglect of this condition had just come to his notice. The patient was a woman 33 years old with a congenital dislocation of the *left hip* which had never been diagnosed or treated. She had a bad limp and about ten years ago commenced having pain on the *right* side which gradually grew more severe. The dislocated hip slipped more and more and the right hip had more and more to do. Dr. Clopton had seen this patient recently and she was just recovering from a severe attack of what looked like tubercular hip disease. The leg was flexed, very little abduction could be made out, some motion in flexion to about 40°. An x-ray picture of the right hip showed deposits similar to osteoarthritis, possibly due to the trauma of her walk. She had never used crutches or any apparatus. The patient was now completely disabled and it was a question what could be done for her. None of the other joints were in any way affected.

Dr. James H. Tanquary congratulated Dr. Allison on the successful outcome of his cases. But a few years ago such cases were much less successfully treated. As to treatment, the prospects of success were greater the earlier the cases were treated. However we may dislike the methods of Lorenz in advertising himself, if he was to blame for it, it must be admitted that since his work along this line there has been great im-

provement in the treatment of these cases. His method is generally adopted now by those who had given most consideration to the study of these cases, and his method had come to stay. Among young patients his methods if carried out gave greater success than any other.

Dr. Kieffer asked the essayist to give the percentage of cases in which the head went through perfectly, and whether there was any means of determining whether the head really was through. Sherman claimed that in 90 per cent of cases it was absolutely impossible to get the head through, hence it was impossible to get a good result.

Dr. Allison, in closing, replied first to Dr. Hoffmann's question as to whether he thought the percentage would have been as large in a hundred cases. Of these 18 hips he felt he was very fortunate to get 9 stable reductions. In 100 cases the percentage of success would probably be less. Still the percentage had gone up so remarkably with the improvement in the after treatment that he would not say it would be impossible to get a 50 per cent success. The best answer to Dr. Kieffer's question is the statistics. Almost everybody has agreed that the thing to do is to subject these patients to the manipulative operation and that in 30 to 40 per cent one will get anatomical reposition without the capsule being interposed between the acetabulum and the head, and that they will stay in position. The open operation was tried first. It gave a greater percentage of failure than the manipulative method. The Boston Children's Hospital reports,

between 1896 and 1902, fifty-four cases operated upon by the open method with 12 successes. This was the Hoffa operation. This point brought up by Dr. Kieffer is quite cleared up by statistics, showing the rapid improvement in treatment.

The thing to do is to manipulate them repeatedly and then, if the hip will not stay reduced, the open operation may be tried. Cases will often relapse. By this method one avoided getting an ankylosed hip which is as bad as dislocation.

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## BENIGN TUMORS OF THE BREAST.\*

By ROLAND HILL, M. D.; C. M., St. Louis.

In discussing the subject of benign tumors of the mammary gland, it is my intention to use the word tumor in its widest sense, and include all chronic adventitious swellings of a benign character.

During the past few years, the bright light of modern surgical investigation has been brought forcibly to bear upon diseases of this region, and has served materially to increase and clarify our knowledge concerning these interesting pathological conditions. The investigations that have been made have emphasized the fact that malignant growths of the breast are found much more frequently than those of a benign character.

They have, also, demonstrated emphatically that there is a tendency, more or less marked, for malignant processes to supervene in the presence of a benign tumor. It is true that some tumors, such as adeno-fibroma, may persist for years without causing any grave trouble,

while other processes, such as Paget's disease of the nipple, usually terminate in cancer within a very short period of time. The fact, however, that certain classes of tumors of the breast usually remain benign, justifies us in making the broad classification of mammary tumors into the two classes: 1, those that are benign, and 2, those that are malignant. In order to determine the relative frequency of breast tumors to other surgical lesions, I secured the statistics of the Johns Hopkins Hospital, since I regarded them as being as reliable as any that could be obtained. A review of these statistics, kindly secured for me by Dr. Hurdon, shows that of the first 13000 surgical cases examined, there were 504 breast tumors. Of this number 163 were benign, while 341 were malignant. Of the 163 cases classified as being benign, there were found the following varieties: Intra-canalicular myxoma, 46; simple cysts, 32; adeno-fibroma, 17; chronic mastitis, 17; acute mastitis, 13; tubercular mastitis, 12; cysts with intra-cystic papillary growths, 8;

\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.



hypertrophied male breast, 6; cystic adenoma, 5; adenoma, 3; lipoma, 2; dermoid, 2.

*Fibroma, Adenoma and Myxoma.*

Of these growths we can describe together, the intra-canalicular myxoma, the adenoma and the fibro adenoma, because of their similarity and close association. In fact, most of the authors describe them all under adeno-fibroma.

Pure adenomata of the breast are very rare, and consist of small tumors, made up of proliferation of epithelium of some part of the gland.

Mixed forms of tumors are very much more common. These consist of glandular structure and increase of inter-glandular connective tissue. Between the ducts of the gland lies a well developed layer of connective tissue, appearing as dense, hyaline masses, with abundant nuclei. It is especially well developed in young women, and is the seat of origin of all fibroma and sarcoma of the mammary gland. Pure fibroma, like pure adenoma, are exceedingly uncommon, but mixed forms consisting of the glandular and connective tissues are met with quite frequently. According to the predominance of one or of another tissue, we make the diagnosis adeno-fibroma, adeno-myxoma, myxo-fibro-adenoma, etc.

The glandular constituents often present limitations which are round or slit shaped, and these cystic fibro-adenomata have a peculiar appearance, since even with the naked eye one can see on the cut surface the reddish, gray tumor masses, studded by numerous finer or coarser cavities, or slits. This appearance becomes

more complicated through the projection of the tumor masses into the cyst cavities. If these projections consist only of fine papillae the tumor may be spoken of as cysto-adenoma papillare, but usually, we speak of cysto-fibroma or myxoma intracanalicularae because the papillary, warty polypous masses projecting into the glandular cavities consist of tumor tissue. The ingrown masses fill up the cavities so that only irregular slits are left, and it is only after removing these masses from the lumen that the latter can be recognized. This form of tumor has been compared in appearance to the cut surface of a cabbage.

In some of these fibro adenomatous growths it is necessary to make more than one section in order to determine its character, as in one part it may seem like a pure adenoma, or myxoma, while in another part the fibrous tissue may prevail. The ducts become elongated, and the acini enlarged, a condition that leads to cystic formations.

In firm fibro-adenoma the connective tissue is hard and firm, while in the softer non-elastic and more rapidly growing varieties it has the character of myxomatous tissue. When the gland produces a mucous serous secretion, the ducts become distended, and cysts appear. If such a cyst contains milk it is called a galactocoele. Clinically, these fibro-adenomata vary in size from a marble to several inches in diameter. Occurring in women under 25 they are almost certain to be benign. They usually occur in young women under thirty, and are particularly common in the upper and outer quadrant of



the breasts. Age is, however, not a definite diagnostic point, as I have personally removed scirrhus cancer of the breast in a woman of twenty-eight. If these growths become very large it is usually due to cyst formation.

These tumors are generally single, and have a capsule, although at times the capsule is hard to differentiate. In one of my recent cases the condition was most interesting. A large fibro-adenoma occupied the lower part of the breast. This was about the size of a small orange, and the remainder of the breast was simply studded with small fibro-adenomatous nodules, about the size of a marble, to such an extent that I considered the removal of the whole gland a justifiable procedure. This occurred in a girl of fifteen.

In another case, in a young woman of twenty, I removed a fibro-adenoma the size of a walnut from the upper and inner aspect of the left breast. The gland seemed intimately associated with the tumor, and a capsule could not be made out.

These fibro-adenomata are freely movable, and, as a rule, not painful. They are not adherent to the skin, and do not tend to recur after removal. Both breasts may be affected at the same time. In cases where the myxomatous tissue predominates, in other words, in an adeno-myxoma, or an intra-canalicular myxoma, where the growth is extreme and involves the entire breast, you are very likely to find sarcomatous changes in the myxomatous tissue. These changes were found in four of the fifty cases analyzed by Dr. Bloodgood. Of cystic adenoma

there were five benign and twenty-four malignant, but it is impossible to say whether the latter started as benign growths or not. These are a different type from the simple cysts associated with senile changes, and sometimes called cystic mastitis.

*Cysts of the Breast.*—While cystic conditions prevail in connection with other growths, as in the adenoma or sarcoma, still they occur independently in many cases, while in others they are the predominating clinical feature of the growth.

J. Hutchinson Jr. maintains that 80 per cent of the cysts occurring in the breast are retention cysts. Wm. T. Bull says that in fourteen years he has seen thirty-nine cases of retention cysts, and eight cases of general cystic disease, but that he has never seen a case of sebaceous or hydatid cyst. (In Bull's cases the majority of the patients were married women.) Of these thirty-nine cases, twenty-two were married and seventeen were single, and in only four was there a previous history of sore nipples. A blow or a fall could be noted as a possible cause in six cases. The ages varied; in seventeen cases the patients were between forty and fifty; in ten cases between thirty and forty, and in nine cases over fifty.

The duration of the disease had varied from one week to ten years. Single cysts were present in twenty-one instances, and two or more in seven cases. Cysts of both breasts were found in four patients, and two or more in both breasts in two cases. The axillary glands were enlarged in two cases.

The character of the cyst contents

varied from a thin turbid serum to a gray or brown fluid.

One of the most interesting contributions on the subject of mammary cysts is that of Thomas Bryant, of England. He asserts, 1. That simple cysts are more common than generally believed; 2. That they usually occur at the same period of life as cancer; 3. That they are amenable to local treatment, without the sacrifice of the gland in which they are situated; 4. That there is no reason to believe that women who have these cysts are more liable to have cancer than those who have not.

Bryant analyzed 242 cases of breast disease occurring in his private work, and found 167 solid tumors, cancer or sarcoma, and 67 cases of cyst disease. Of the 12 cases remaining 8 were adenomata, 2 lipomata occurring in parts covering the breast, and 2 were carcinoma (in men). These facts suggest the conclusion that one out of every four tumors of the breast will be a cyst.

A further analysis of these statistics shows that 77.5 per cent of these cysts occurred in women who were over forty years of age, or at the same period of life as cancer. There were but two of these cysts that contained intra-cystic growths, and they were found to be cancerous. Bryant further states that very large cysts, if left alone, are almost sure to develop intra-cystic trouble.

*Diagnosis of Cysts.*—The diagnosis of cysts of the breast is sometimes a very simple matter, and then again we meet with cases in which a differentiation from cancer is attended with almost insurmountable difficulties. Cysts are usually sharply

outlined masses that give elastic resistance. The skin is not adherent, the nipple is normal, and there is usually no discharge from the latter. If there should be a bloody discharge from the nipple, it indicates papillary ingrowths, and suggests the probability of a malignant process being present. When the wall of the cyst is very much thickened, malignancy is especially to be feared.

Another characteristic of cystic growths is that they may be larger at times than at others, and, if small, they may temporarily disappear. These growths are often associated with slight twinges of pain, and pains radiating down the arm. If an aspirating needle be used a serous, watery or brownish fluid will usually be obtained. Where the contents are cheesy in character the use of an aspirator will be of no value as an aid to diagnosis.

The retention cysts are of chief interest because of their liability to be mistaken for carcinoma. This mistake is especially liable to be made if the cyst is situated in the neighborhood of the nipple. If it becomes the seat of a chronic inflammation, the danger of a mistake in diagnosis will be greatly increased.

Where a cyst is deeply seated in a large breast, it is sometimes impossible to make an accurate diagnosis.

*Cystic Mastitis.* is another condition deserving of separate consideration. This disease has been called interstitial mastitis by Virchow, while Schimmelbusch applied the term, cysto-adenoma. In this condition there is a cystic dilatation of the glands, and probably an increase



of the interstitial connective tissue. This latter statement is, however, denied by some observers.

We find this disease occurring in women over puberty, especially where they have given birth to children, and have not nursed. It may affect not only one, but both breasts.

According to Koenig, the following symptoms are characteristic: On examining the breast between the thumb and finger, nodules can be distinctly felt. These nodules are frequently not to be palpated if the breast is compressed in any way than from before backward. The individual nodes are rarely more than an inch in diameter, are tense, and may fluctuate. Occasionally it is possible to squeeze a milk or dark fluid out of the nipple. The skin does not become reddened, and there is no tendency for the tumors to become adherent. These swellings have a tendency to become enlarged and tender during menstruation. This disease is in itself a benign condition, and may persist for many years without causing serious trouble. Benign changes of this sort may, however, be the primary cause of papillary epithelial growths in these cysts.

It is estimated that from 5 per cent to 10 per cent of these cases undergo carcinomatous transformation. Partial excision of the breast does not prevent extension of the disease, and complete excision is indicated, especially if the patient suffers from neuralgia, tenderness or other annoying symptoms. These processes may develop very slowly, or again they may appear in a comparatively short time.

In one of my cases, operated upon recently, the patient, a woman of forty, had noticed a lump in the breast for two weeks. It was nodule, semielastic and nonadherent. Excision of the breast showed it to be honey combed with small cystic areas in the affected region. These little cysts were filled with a yellowish, serous fluid.

Of the other benign tumors of the breast may be mentioned the lipomata. It is questionable if any of these tumors occur in the gland itself, but they may be so intimately connected as to be inseparable. Gross says that he is not aware of a single case of circumscribed lipoma occurring in the mammary gland. Bland-Sutton makes no mention of this affection. Sir A. Cooper removed one situated behind the gland that was 31 inches in circumference, and weighed 14 lbs. 10 ozs.

Tuberculosis of the breast usually occurs after puberty and is generally found in women who are of a scrofulous tendency.

The infection may take place through the gland ducts or from the blood or by extension of the disease or neighboring parts.

It usually manifests itself as a hard injured mass that fluctuates in the center forming a so called cold abscess. Sometimes however, it is disseminated and occurs as a number of nodules that undergo chronic suppurative changes. The nipple is often retracted but the breast is freely movable on underlying tissues.

The course is very chronic and occasionally the axillary glands become involved.



Another tumor rarely met with in this region, is a chondroma. Sir A. Cooper removed one from a healthy woman of thirty-two, which was of fourteen years growth. The pain was very severe, and the tumor was exceedingly hard. On removal, one part of it was found like the cartilage which supplies the place of bone in young subjects, and the other part was ossific.

Sebaceous cysts of the breast have been seen by a few surgeons. Haeckel reports two cases of this sort, one of which was associated with cysto-sarcoma phyllodes. The cysts in the breast rarely gave rise to pain, and were easily shelled out.

Hydatid cysts of mammary gland are exceedingly rare: only about twenty cases have been recorded. These cysts develop slowly, and without any pain. Their contents are albuminous, and resemble water. Hooklets are rarely found. They are readily cured by incision, and removal of the sac wall.

Hypertrophy of the mammary gland is due to an increase of the normal constituents of the breast itself. Sometimes the condition becomes so exaggerated that it interferes with the occupation of the patient. In these cases the breasts are extremely large, painful and tense. Where the size is excessive, fibro-sarcomatous nodules will often be found. Hypertrophy of one breast always suggests new growth.

A case of actinomycosis of the mammary gland is reported by Von Bergmann. The patient, a woman of twenty-four, had five children, the youngest four months old. On reporting for treatment, it was

found that the right breast had been swollen for three weeks. At the lower and inner part it was indurated. It was freely incised, and pus and necrotic tissue removed. General infiltration and adherence to the underlying tissue took place and actinomycosis granules were found in the pus. Complete excision of diseased tissues was resorted to, with temporary relief, but patient died later, of internal metastases.

In considering the liability of simple growths to become malignant, it is well to dwell for a moment on the origin of cancer.

J. Orth, in voicing the opinions of the great German observers, states that cancer originates from epithelial cells. He states that connective tissue cells cannot be converted into epithelial cells, and vice versa.

In cases of secondary cancer, the growth occurs as in the liver, from detached cancer cells. These develop and the ordinary liver cells become atrophied from pressure. Orth says that up to the present time, no one has produced proof that carcinoma is of parasitic origin. (2) that there is no necessity to assume a parasitic etiology of cancer. In view of these assertions, we are prepared to find other causes, as diathesis, environment, mechanical irritation, etc., tending to produce those peculiar and uncontrollable proliferations of epithelium peculiar to cancer.

Leaf has shown that malignancy has a direct relation to the amount of irritation to which a breast is subjected. He shows that it is much more common in women who have had children than in those who have not.

The old theory that a blow in the breast will often cause carcinoma certainly finds corroborative evidence in the large number of cases he has examined. If this be true, how easy to explain why the fibrous tissue in a fibro-adenoma, while not subject to carcinomatous changes itself, may prove as an irritant, and produce in some congenital matrix malignant trouble in the glandular epithelium.

J. Hutchinson Jr. states that he has seen carcinoma develop in the site of an adeno-fibroma of thirty years standing, and quotes a friend, Dr. Hollingsworth, as having examined another similar case.

Senn states that adeno-fibroma are particularly liable to take on malignant activity, but the literature I have examined hardly bears out this statement.

Schafstein (Munich 1889) stated that of 989 cases of cancer of the breast 23, that is, about 2.3 per cent, arose from adenomata.

F. Curtis and Wood report a case in a patient of sixty where one part of the growth showed gelatinous cancer, while in the rest nothing but adeno-fibroma could be found. In another case they could find nothing but adeno-fibroma of the breast but cancer of axillary glands.

Some observers seem to think, on the other hand, that carcinomata are carcinomata from the beginning. Thus, Welch doubts the statement that there can be a degeneration from benign to malignant growths, and claims that while it may be true that the benign tumor may show malignant transformation, there was, primarily, a malignant matrix

at the base of it. This is in accord with Cohnheim's theory, which implies a congenital matrix of immature, embryonic cells "for every tumor.

While every tumor that shows malignant activity may have a congenital matrix, it is almost a certainty that similar embryonic conditions must exist in every human being. It is equally certain that these matrices remain, as a rule, harmless, unless brought into activity by a number of definitely recognizable causes. We know that what is, clinically, a benign growth may, after years of quiescence, acquire definite malignant changes that will destroy our patient.

*Treatment of Benign Tumors of the Breast.*—In the light of modern surgery, there is but one rule to follow in treating these growths, and that is to remove them. Cancer has been definitely proven to be, primarily, a local process, and as such is amenable to cure if radical procedure be resorted to at the beginning. If we aspirate a cyst and find clear fluid, we cannot be sure, by any means, that it is wholly benign, and does not contain the nodular commencement of some malignant growth.

If during our operative procedures, a doubt arises as to the character of the tumor, trustworthy means should always be at hand to determine at once its true nature. By making frozen sections, and examination under the microscope, we are usually able to determine in a very few minutes whether or not the process is malignant, and, if necessary, radical measures can be re-

sorted to without allowing the patient to come out from under the anaesthetic.

It is hardly necessary here to dwell upon the operative technique resorted to in these different conditions. The adenomata and allied growths are usually encapsulated, and easily shelled out, although in some instances it may be necessary to remove a segment of the breast. It may be stated that some surgeons advise against removal of these adenomata if they are under the nipple or diffused throughout the breast. Chronic cystic mastitis demands removal of the whole breast. Cysts, while often cured by aspiration, can be more satisfactorily treated by removal. Thomas Bryant lays special stress on the dissection of these growths without sacrifice of the gland.

In concluding the subject of treatment, I wish to urge the removal of every adventitious growth in the mammary gland with the possible exceptions mentioned, and if suspicious, its examination under the microscope.

Before closing, I wish to enter an earnest protest against the plan so often adopted, of watching a breast tumor to see how it develops. I have known lives to be sacrificed in this way. A tumor in the breast is, to say the least, an undesirable tenant, both because of its mechanical effects, and the liability of its changing in character, and, also, because of its mental influence on some patients. Considering the fact that these growths can be removed with nearly absolute safety, and that malignancy in its early stage

can often be obliterated, I wish to earnestly reiterate my protest against the expectant plan of treating any of these lesions.

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### DISCUSSION.

Dr. Edmund A. Babler, St. Louis: I want to impress the fact that every tumor of the breast, no matter how insignificant it may appear, should be removed, and a microscopical examination made, at the earliest possible moment. The reason that such heroic operations are so often necessary, and the reason that so many women die of mammary cancer, is due to the fact that the little, apparently insignificant lump has been permitted to grow. In this day of dropmethod etherization and perfect aseptic surgical technique there can be no reason for delay.

The fact that more than three-fourths of the tumors of the breast become malignant or are malignant in character, demands consideration. How often does the surgeon see the patient when it is too late? How many valuable lives could be saved, and how much agony could be prevented, by early removal of every mammary tumor—removal at an hour when surgery offers so much. The mortality of breast surgery to-



day is the mortality of delay. I believe that it is the duty of each of us to urge the early removal, and microscopical examination of every tumor of the breast.

Dr. John C. Morfit, St. Louis: In round figures 80 per cent. of all tumors of the breast are malignant, 50 per cent. of all tumors of the breast can be diagnosed clinically as malignant and 30 per cent as prob-

ably malignant. That leaves about one-fifth that are doubtfully benign. Most of them are of the cystic or adenomatous variety. Because of the great danger of malignancy we must make the diagnosis positive, and I don't think the author emphasizes any better point than when he urges the removal of the tumor for diagnostic purposes so that we may proceed to any further treatment that may be necessary.

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### RECTAL PALPATION.\*

By EDMOND A. BABLER, M. D., St. Louis, Mo.

In presenting this subject to this association, it is my sole desire to impress upon the mind of the young practitioner the importance of always making a rectal examination in all pelvic lesions, and in every instance in which the true nature of the abdominal lesion has not been accurately determined. I am confident that many valuable lives have been, and are being lost almost daily simply because we have failed to grasp the golden opportunity.

In many instances a rectal examination will be found to be of more value in leading us to a correct diagnosis, than all of the other methods combined. In every instance it is our duty—our sacred duty, to secure a complete previous history of the case, and to make a thorough painstaking examination before attempting to alleviate the patient's suffering. Experience has taught us that abdominal pain is Nature's

most trusted messenger: the messenger that is to guide us to the seat of trouble.

In the few brief moments that have been allotted to me, I can but call attention to some of the more important and more common lesions, in which a rectal examination will be found of the most vital importance. Among these may be mentioned the following:

*Extra-Uterine Pregnancy.* When the sac of an ectopic pregnancy ruptures, the patient complains of sudden, severe, excruciating pain low down in the pelvis. But how do you know that the pain is not due to a perforated appendix?

I believe that the finding of a boggy, pulsating mass just to the side of, or posterior to the uterus, in a married woman of child-bearing age, who has been suddenly seized with excruciating pain low down in the pelvis, nausea, rapid pulse and signs of anemia—especially if there be the least confirmatory sign of pregnancy, is sufficient

\*Read at the meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

to warrant a diagnosis of ruptured tubal gestation sac, and to demand immediate celiotomy. By simply securing a complete previous history, and by making a thorough, painstaking, examination, *especially a rectal examination*, we have thus cleared-up the diagnosis.

*Intestinal Obstruction.* In intussusception a rectal examination will often enable us to appreciate the true significance of our little patient's symptoms. We find the little fellow, whose slumbers have been rudely interrupted, suffering with paroxysmal pain in the abdomen, and a diarrhea. We find him straining at stool as though his little heart would break; the stool consists of blood and mucus; and may have no fecal odor. We question the mother and she tells us that the boy had been in apparent good health; but upon introducing our finger into the rectum we may find a peculiar shaped mass that reminds us of the uterine cervix; perhaps we find a mass protruding from the anus. Are we going to say that the child has a diarrhea and a prolapsed anus? No! we are going to make a painstaking examination and find that he has an obstructed intestine, and that a competent surgeon is needed at once!

When the sigmoid flexure becomes twisted upon itself, the patient complains of colicky-like pains in the lower abdomen. The pains become more frequent and more severe. Meteorism of an ascending type develops in the left inguinal region, and gradually our patient presents the characteristic picture of an intestinal obstruction.

By considering the age of the pa-

tient, the history of the onset, the ascending meteorism, the complete constipation, the inability of the rectum to hold but a small quantity of water, and the findings obtained by rectal palpation we determine the cause of the symptoms.

About a month ago I operated upon a case of chronic appendicitis in a boy of eighteen. Everything went along beautifully until the end of the second week when symptoms of post-operative obstruction appeared. I must confess that I was at a loss to account for the symptoms since the nurse had informed me that the patient's bowels had moved every second day; the abdomen was not rigid, and the patient seemed to be in good condition. But upon placing my finger in his rectum I found the latter occluded by hardened feces. How often do we find this condition in cases of prolonged illness, and how quickly do all of the symptoms subside so soon as the bowel has been evacuated.

*Appendicitis.*—Before a diagnosis of appendicitis is permissible, a complete previous history *must* be obtained, and a thorough, painstaking examination—particularly a routine examination, including a rectal palpation, *must* be made. Experience has taught us that simply because a *patient complains of pain in the right inguinal region, it is not at all certain that he has an infected appendix.* How often has appendicitis been diagnosed as salpingitis, neuralgia, and *vice versa*? How often have we made a diagnosis of appendicitis, and upon opening the abdomen found a perforated stomach, a distended gall bladder, a diseased ovary or a diseased bladder? And

why did we err? Simply because we had *not* secured a complete previous history and had *not* made a *thorough, painstaking examination.*

*Lesions of Uterus and Adnexa.*—

In all lesions of the uterus and adnexa a careful and thorough rectal examination is absolutely necessary, if a correct diagnosis be most frequently obtained. By simple rectal palpation we are often enabled to exclude a lesion of uterus and adnexa and thus avoid error. It seems needless for me but to call your attention to the subject without going into detail. I am confident that the young practitioner should make a rectal examination more frequently than he has done in the past. The possibilities of rectal palpation in lesions of the uterus and adnexa are self evident.

*Lesions of Rectum.*—Whenever a patient complains of vague symptoms in the lower abdomen, a rectal examination *must* be made. A case that very forcibly impressed this fact upon my mind was recently operated upon.

The patient, a woman perhaps 60 years of age, had been complaining

for several months of a diarrhea, and frequent, paroxysmal pains in the lower abdomen. Her family physician had made a diagnosis of ulceration of bowels. Upon introducing my finger into the patient's rectum I found a large, hard, immovable mass that obstructed the intestine. Upon palpation of the abdomen we found quite a few masses of hardened feces that could readily have been mistaken for malignant tumors. Upon opening the abdomen I found a cancerous mass of such a nature that radical operation was useless. Surgery had come too late! All that could be done was to make an artificial anus.

We know that fistulae can be diagnosed by rectal palpation, and that at times the history of some lesions is quite sufficient to guide us. It seems quite unnecessary for me but to call attention—the attention of the busy, conscientious, toiling mortals who are trying to be of some service to suffering humanity, to the importance of *always making a rectal examination in every pelvic lesion and in every obscure abdominal lesion.*

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## MEDICAL OBSERVATIONS IN THE FAR EAST.\*

By MARY McLEAN, M. D., St. Louis.

We reached Shanghai February 27th, and a few days later I visited Dr. Boone's Hospital, of the American Episcopal Church. Dr. Boone has been in Shanghai between thirty and forty years; is a physician of

fine education and broad sympathies, and of ready inventive genius; is greatly beloved by the Chinese among whom he has labored these many years. He has a hospital of about 100 patients which is equipped with a modern operating room, but is unheated except in the operating

\*Read before the St. Louis Medical Society, December 23, 1905.



room. In fact, all over China we found the hospitals unheated although the temperature was frequently down to the freezing point.

Dr. Boone has also a small Medical School connected with his hospital and had about ten students in the school when we were there. Contrary to the American and European custom the medical student in China is paid a small monthly stipend; because any young man of his age is obliged to contribute something to the family support, unless the family is independently wealthy.

Dr. Boone told us that one of his earliest patients in Shanghai was a poor laboring man. He required a surgical operation which was successfully done to the great amazement of his friends. A few days after this patient was discharged well, a wealthy Chinese gentleman called upon Dr. Boone and expressed his great admiration at the work done. He then declared himself a distant relative of the patient, who was so successfully operated upon, and wished to bestow upon Dr. Boone a gift in recognition of his valuable services. He asked Dr. Boone what he wanted and the doctor had no hesitation in telling him he wanted ground and a hospital built on it. This gentleman very shortly bought a fine piece of ground for the purpose and presented it to him. A few months later he called on the doctor and seemed surprised that there was still no hospital on the ground. Dr. Boone told him he did not have sufficient means to build it, with the result that this same person gave him enough money to erect the first hospital building; and

from that time the largest gifts have been from the Chinese themselves; at least \$65,000.00 having been given to this hospital by the Chinese. Dr. Boone told me that he never charged fees because it paid a great deal better to receive the gifts of gratitude. The Chinese character seems to be constructed on a far more generous plan than the American.

In this hospital in Shanghai a great many of the most serious operations are performed but its patients are men and boys only. Quite some distance from this hospital and to the west is a large woman's hospital which was opened about twenty-two years ago under the able supervision of Dr. Reiffymder, a graduate of the Woman's Medical College of Philadelphia. Dr. Reiffymder has operated upon the largest ovarian cyst on record. It weighed 180 lbs. (with its contents), and the woman after its removal weighed 65 lbs. She made an excellent recovery.

This hospital building is only seven or eight years old and was built after the burning of the old building, entirely with the gifts of the Chinese people. It has a capacity for 60 women and has a daily clinic of from 100 to 300 women and children. Some of the cases brought into this hospital are of such desperate character that we could safely predict an early death in our own country; but in China they recover with comparatively little attention. Their power of recuperation seems far beyond that of our people. They have a great many neglected obstetric cases, quite a number of most loathsome skin diseases, and a great

many cases of serious burns inflicted by the owners of slave girls upon their slaves. A favorite punishment of these human monsters who own slave girls is to compel them to lie on a floor, and to pour boiling water over the abdomen. Fortunately, this most frequently results in early death, and yet, a good proportion of these children survive with most horrible suffering. In this hospital I saw a dying woman getting ready to leave the house. On inquiring of Dr. Rieffymder why she was leaving, as she looked as though she could not live 48 hours, the doctor told me, that, it is a custom in China to hold the head of the house in which a person dies responsible for that death to the extent of requiring him to pay all the funeral expenses. Therefore, unless the friends of the patients, upon their entrance, are willing to sign a paper releasing the hospital physician from that responsibility, it becomes necessary to allow the patients to go home to die. Indeed this custom has led to the frequent practice of committing suicide on the door steps of an enemy as a matter of revenge. This is practiced most frequently by the women of China.

I saw a very little of the native Chinese medical methods but I heard a great deal. I did see a kit of surgical instruments belonging to a Korean surgeon and was told that the same instruments were used in some parts of China. These instruments consist of various lengths and calibres of needles which are used in the several parts of the body to release the evil spirit which they suppose to be resident in the afflicted body. The needle is forced into the

part of the body which causes pain. For instance, pain in the eye would be relieved by piercing the eye; of course resulting in the loss of the sight. Pain in the chest is treated by forcing the needle into the part of the chest affected. Occasionally the heart itself is pierced in this way. But they are sustained by the confidence which they have, that this gives an outlet to the evil spirit which is causing the trouble. I knew of a case in China in which a little child was treated for some unknown disease by giving it a cooked piece of flesh cut out of its mother's arm, and was told that the mothers, in turn, are treated by the cooked fragments of flesh from their own children. The Chinese herb doctors use mixtures—the most nauseating—and give them in doses of a bowlful. They are also exceedingly wise—these Chinese doctors—in determining the patient's disease and condition by examining the pulse. We met two Chinese physicians, who had been educated by Missionary doctors, and without having had the advantage of foreign schools, they were doing very creditable work.

We visited the most interesting medical institution in the city of Hang Chow under the supervision of Dr. Main of Scotland. He has been in charge of medical work in Hang Chow for twenty-five years, and has built up several large institutions. He and his wife personally supervise all of them and they are supported almost entirely by the Chinese, although an immense amount of charitable work is done in them. He has trained his own assistants both as physicians and nurses, and has a most capable corps



of assistants. He has a hospital with a capacity for 200 patients; requires each patient admitted to have a thorough bath and a change of clothes in order to keep the ever-present vermin of China out of the hospital. He told us that he uses one ton of carbolic soap every year. He has, in addition to this general hospital which is partly for men and partly for women, an institution for lepers and has also a school for leprous children. He has built out on the lake—the west lake of Hang Chow—a very fine tuberculosis sanitarium which is used both for foreign missionaries and for the Chinese. He has a large science hall where he gives scientific lectures in the mandarin dialect to the wealthy and official classes of Chinese, and he is also employed by wealthy contractors for their coolies. All of this work Dr. Main conducts in connection with gospel work, which was his primary work in going to China and is his primary object in remaining there.

We saw a most interesting hospital in Kin Kiang conducted entirely by a young Chinese woman who was educated in the University of Michigan. She has trained her own assistants, had eight well-trained nurses when we were there, and has most capably and successfully managed the institution financially as well as medically, surgically and domestically. She does a great number of surgical operations every year including many operations upon the eye. She is much sought for by the official and wealthy classes and does a great deal of work among the very poor outside of the hospital. I am sorry to say, that the only foreign

physician in that city refuses to consult with her, because she is so popular among the foreigners of that city; but then,—he is an Englishman.

In the city of Tien Tsin we heard of a Chinese Government Medical College and were told that it was pretty well conducted, although not up to European and American standards. We were unable to visit this college.

The finest educational work we saw was a work just starting in the city of Pekin where the medical missionaries of four different missions unite in teaching medicine to Chinese young men. They have four hospitals for practical work and are very finely equipped for doing excellent work in their line. In China one does not find close denominational lines as we find at home. Some one has said, that, almost the only thing that separates Presbyterians, Methodists and Baptists in this country is water and that they have not enough water in North China to keep up the separation.

In the city of Pekin we met for the first time in the Chinese hospitals with the kang—the Northern Chinese bed. The mission doctor had a hospital built on the foreign style and furnished with comfortable foreign beds, but also had a few rooms in addition to this hospital, built in Chinese style with about one-fourth of the room devoted to raised platform of brick and cement with a little opening underneath for a charcoal fire. The Chinese greatly prefer these kangs, which is the name of the raised platform, and they will sleep four or five on a



kang rather than go to the second story and sleep on a foreign bed which, they think, is possessed of evil spirits. Our friend in Peking had all of her kang rooms overcrowded while nearly the entire second story of her well built hospital was empty.

On leaving China we passed rapidly through Korea but spent one hour seeing a mission hospital in Seoul and another hour in visiting a hospital at Fusan. Both were built in foreign style, both were full to overflowing with patients, and both had very capable young Korean assistants who had received their education from the missionary physicians.

We reached Japan about eight weeks before the Portsmouth Treaty was agreed upon, and had a most interesting opportunity to visit the large military hospitals and to see some of their military surgery. The hospitals consist of a large number of temporary buildings constructed for war purposes in the magnificent old Daimis parks, of which there are several in Tokio. We visited the Red Cross and the Toyama hospitals which were among the largest and best equipped. Each had a capacity of about 7,000; but the wards were one-story, long, frame structures with windows on either side, a little hall in the middle between the two long rooms, and a large bath room at either end. The well known bath tendency of the Japanese was abundantly illustrated in these hospitals. The soldiers were all dressed in white kimonos with a red cross on the left arm and a red cross on the front of the cap, and they laid either

on foreign beds or on very thick mattresses placed upon the floor. They all seemed very comfortable in their beds. They were bountifully provided with good, nourishing food, many of them being provided with the richest sterilized milk in addition to the regular diet. A visit to the diet kitchen found everything in a state of extreme cleanliness, and their milk sterilizing plant, although very simple and inexpensive, seemed wonderfully complete. All the work of this kind seemed thoroughly done. In the surgical dressing rooms of these hospitals we would find as many as twenty soldiers at a time being dressed and waiting their turn: and during all of our observations through two months, we never heard any groans or complaints of any kind during these exceedingly painful dressings.

The Red Cross Hospital is devoted primarily to the officers of the army and navy, but, with its large capacity, has, in addition to the officers, a large number of privates. The Marchioness Oyama, an old school friend of mine, gave us letters of introduction to Dr. Hashimoto, a leading Japanese physician and surgeon, who is the head of the Red Cross Hospital. He courteously invited us to see some of the military surgery in that hospital. We saw one lower maxillary resection, one plastic operation on the jaw without resection, and the removal of an incapsulated bullet from the calf of the leg. In the room for making preparations I found a black-board with beautiful diagrams in colored chalks of the region involved in the operation. The muscles, nerves, arteries, veins and bones were all

clearly marked with their German names—a very delightful way of refreshing one's memory on anatomy. The leg containing the incapsulated bullet had been subjected to the x-ray, and the radiograph was conveniently placed in the window of the operating room for ready reference. The nursing in all the Japanese hospitals I visited was beyond reproach and quite superior to the operating room nursing in our own city. I think this superiority was largely due to the fact that they had plenty of nurses—never less than five in an operating room. Each nurse had her duty and attended strictly to it, and there was not the slightest confusion. The Japanese surgeons work in a painstaking way, skillfully and always good naturedly. Swearing is unknown in Japan either in professional or social circles.

The case of resection of the jaw was operated by a young surgeon who had been educated in Germany, and he was assisted by a dentist who had been seventeen years in this country. The surgeon did all the work up to the time when a piece was to be inserted between the separated fragments of the jaw. Then the dentist prepared a little piece of aluminum, moulded to fit the case, perforated it with a hand puncher, bored through the bone with a dental machine, and wired the metal piece into position. The surgeon then finished the operation, restoring the flaps.

I saw in the ward a case which had been similarly operated six weeks previously, where the result was all that could be desired. They make a special effort to preserve the

symmetry of the face and have admirably succeeded in doing so. We saw in these hospitals very interesting cases of beri-beri, both in the oedematous stage and in the atrophic stage. Beri-beri seems to be the most frequent and most formidable of their diseases, and they are still in the dark as to its etiological pathology.

I also had the pleasure of visiting the Imperial University Hospital and of seeing some abdominal sections by Prof. Kinoshita, who was educated in Germany. Prof. Kinoshita is the leading gynecologist of Japan and a most delightful Christian gentleman. He has a record of 200 complete hysterectomies for fibroids with two deaths—a record not easily surpassed. I saw a complete hysterectomy for fibroids by his assistant and the removal of the appendages for malignancy—presumably epithelioma—by himself. The work was very skillfully done without the slightest nervousness or ill nature. They have a large number of serious pelvic and abdominal operations in the Imperial University but a very small number of appendiceal troubles. The Imperial University Hospital is the finest constructed hospital in Japan and is built in the pavilion style of architecture.

I saw very little foreign medical work in Japan, as it has become almost superfluous in modern Japan. The medical department of the Imperial University uses the German language almost exclusively, so that the medical men easily converse in German, and this fact, together with their unfailing courtesy, makes a visit to Japan a very delightful ex-



perience to professional people.

#### DISCUSSION.

Replying to a question, Dr. McLean said that the object in burning these slave girls was simply cruelty. In reply to a query by Dr. Hopkins, as to the sanitary conditions, she stated that there were no sanitary arrangements in China. As an example of the state of affairs there she cited one instance. At a small pond, the water greenish black and very thick, was a woman soaking her vegetables, while near her a coolie was washing his feet, a pig was wallowing, and a woman was washing her clothes. Replying to a question by Dr. Funkhouser, Dr. McLean said that she had seen several native surgeons who had been educated by western teachers and they were doing very good work.

Dr. A. W. Fleming thought that the Chinese in one respect gave us an example that it might be well to follow. He understood that drunkenness was almost unknown there. While they had some form of drink, alcoholism is not one of their vices. Dr. McLean had spoken of the obstetrical customs. Our text-books state that pyemia and septicemia were rarely found among the Chinese, but he had been informed that this was a mistake. Certainly the habits they have in obstetrical work were something awful, and foreign physicians were only called in after all means at their command had failed. Even then the only idea in calling in the physician was that the child might be born before the mother was dead, otherwise the mother would continue in this suffering through all eternity. Dr.

Fleming's sister had been a missionary there for a number of years and had told him much of their lives. Some features showed rather a good type. His sister believed the Chinese race superior to the Japanese so far as truthfulness was concerned. The Japanese were treacherous and could not be trusted while the Chinese were relatively truthful. One thing that showed the tendency of the Chinese toward progress was the fact that they were beginning to accept the teaching of other countries. Dr. Fleming considered it a question whether the missionaries sent there would ever accomplish what they were aiming to do. The mixing of medicine and religion, however, might reach many of them.

Dr. Hart Goodloe asked the essayist's reason, why the Chinese and Japanese were able to stand so much more pain in comparison to our people without complaint.

Dr. McLean thought that it was because it was drilled into them. From early childhood they were taught that it was unmanly or unwomanly to complain. At Nanking Dr. McLean had seen the old halls where the students took the second highest degree in the Confucian classics. As many as 26,000 students took these examinations at one time. Each student occupied a kind of stall, having a board to sit upon and one on which to write, the student being supposed to write consecutively for three days and three nights. No less than fifty students died during each examination. This was considered a most disgraceful thing. Of the 26,000 applicants never more than 300 received the coveted degree and many



of those who did were invalids for life. Replying to a question by Dr. Hopkins, Dr. McLean said that the destruction of female infants was no greater than in this country. There was a good deal of that in America, too. She thought we had made rather too much of the situation there in regard to that matter. Those people were dreadfully poor. She met one woman who had destroyed eight girl infants. If these children of the very poor were permitted to grow up it would be to become slave girls, for the people were too poor to keep them.

Dr. Funkhouser asked Dr. McLean why it was these people seemed so stolid in the endurance of pain. It was claimed that the higher the development of the individual, morally and physically, the more acute was the sensitiveness to pain. Some German had made the statement that for this reason woman was on a lower plane than man, because she could bear pain better than a man. Dr. Funkhouser questioned the correctness of that deduction. This matter of the endurance of pain had been taken up by a number of writers, Bacon, particularly, who was a physical coward because he feared pain. For this reason many great men had not had the courage of their convictions. Dr. Funkhouser wanted to know Dr. McLean's opinion of the moral state of the Koreans, Japanese and Chinese. Was it that their education, a fatalistic philosophy, had something to do with it? Was it this fatalistic belief which led them, like the people of Russia, to say, "what matters it?" If one has a disease, "what difference does it make?"

What influenced an individual influenced the nation. The Spaniard's weakness was procrastination. The ideals of the Chinese might have much to do with their power of endurance. Every nation that had been successful in its warfare with the Chinese had been absorbed by them. The Jews, for instance, had a foothold there and were absorbed by them. The Manchus, for instance were a different race. The conquerors were ultimately conquered by the Chinese. In a consideration of the Aryan, Semitic and Turanian races one must consider them separately. The Chinese and Japanese language was a syllabic language. Now they had begun to consider whether or not to have an alphabet. Religion was simply a question of philosophy with the Chinese. As to the moral standards of the Chinese compared with western standards and the standards of the Japanese, Dr. Funkhouser believed that the Chinese had a higher standard than the Japanese.

Dr. McLean replied that her personal observations were limited; but she had had a great deal of conversation with persons who had lived there for many years. The moral standards of the Chinese were not high compared with ours. They were taught that filial duty was the highest virtue, and both in China and Japan it was considered a most laudable thing for a girl to sell her person for a number of years for the support of her family. The Chinese, like ourselves, differ individually in regard for truthfulness. There was so much pretense with them. For example, she had seen two men having a terrible fight, talk-

ing fearfully and they had to keep it up until a third person came in and separated them, otherwise the one who ceased fighting would "lose face." It was generally considered that the Japanese were inferior to the Chinese in truthfulness, but those Japanese whom Dr. McLean had come to know well seemed to her of a very high type. Their morality, so far as their women were concerned, was not very high. The emperor had many concubines, but the crown prince, according to the missionaries, was a very moral man. He had promised to have but one wife and he treated this wife with the greatest respect.

Dr. Henderson said Dr. McLean made the statement that the surgeon in China preferred to leave his fee to the liberality of the Chinese rather than to make a charge; and she also mentioned that she had but one patient who gave her more than the amount of her bill. Dr. Henderson said three patients had paid him more than the amount of his bills, a German who could speak no English, a Hebrew and a Chinaman. He had been told that the Chinese were taught that it was a virtue to make presents and that their future reward would be commensurate with their liberality in this life. He asked Dr. McLean if it was true that they believed this.

Dr. McLean said she had never heard it.

Dr. Henderson, speaking of the lower types having less nervous susceptibility and the higher types more of this susceptibility to pain, he said he was reminded of an Indian upon whom he had had to do a Chopart operation on the feet.

The anesthetic gave out and he had to complete the operation with the patient sitting on the table watching the proceeding. He was a boy of about 19, but didn't move a muscle. When the operation was completed he merely said, "Good." In the Civil War, it is said, the negroes were the best patients. When wounded they could always wait patiently till the last while the whites made such a disturbance they had to be attended to at once. The negro, too, always kept his accoutrements, while other fellows threw theirs away.

Dr. William H. Stauffer said that Dr. Henderson's speaking of the Indian reminded him of his two years' experience some eighteen years ago in treating the Indian. His observations had been in the Indian Territory, among five or six different tribes, from the Osages, practically full-blooded Indians, to the other mixed tribes. Every white man got 160 acres of land with each squaw and there were usually a large number of half breeds, so that they were rather a mixed lot ranging from the girl graduate of Wellesley down. It was not difficult to do surgery on the boys from the wigwam. They expected no anesthetic. But he did have trouble in internal medication. None of the Indians would take anything until the doctor took a little of it first. For this reason it was necessary always to have his pockets full of various little pills and powders. Their desire for liquor was uncontrollable. On one occasion they broke into the office and even used the red ink for the little alcohol it contained. Dr. Stauffer questioned the advisability

of educating the Indian. He believed with Sherman that the only good Indian was the dead Indian. They wouldn't work unless they had to. At least 75 per cent of those people in the Indian Territory suffered with one or all of the venereal diseases and in fifty years from now there would be but few full-blooded Indians remaining.

Dr. Funkhouser asked if Dr. McLean had noted whether the Chinese and Japanese were especially open to the influence of suggestion. In many cases people of a certain mental development were more or less amenable to suggestion. In his own experiments upon the lower animals, chickens, for instance, he had been accustomed not to give an anesthetic, and after the first cut he had been able to go through to the peritoneal cavity without any sign of pain whatever. It was undoubtedly a fact that chickens and ducks could be controlled in this way. Suggestion probably had much to do with the apparent stoicism of certain peoples, especially when the intelligence was of a limited character.

Dr. Barclay wished to know if it is not an established fact that those who habitually practiced autosuggestion were more susceptible to suggestion from others.

Dr. Funkhouser replied in the affirmative.

Dr. Barclay said that as perception increases sensation diminishes. He had learned this fact during his senior year in his academic course. The following vacation he had some twenty-four dental cavities filled; and found, that, when he used a hand mirror to watch the operation and that when he counted

the strokes of the filling hammer, he became so engrossed in perception of the work that he actually lost all sensation at the time. Possibly the fact that the Indian spoken of by Dr. Henderson had been allowed to watch the performance of the operation upon his foot had rendered him less sensitive to pain.

In regard to suggestion and auto-suggestion for the relief of pain in surgical operations, Dr. Barclay recalled a scene at St. Mary's Infirmary years ago. Dr. Benno von Steinmetz he believed it was, hypnotized a negro, whose skull was then trephined. The patient gave no indication of feeling pain. After the operation, the patient, under suggestion, while hypnotized, walked unassisted to his bed two stories above. He made a good recovery.

Certain facts in connection with the physical habits of the orientals should be taken into consideration in explanation of their stoicism, fortitude, and tenacity of purpose. Their education is more along the line of spiritual development. They are taught to do work because it is their duty to work, without cherishing personally interest in the result. Personal interest in the result of one's work leads one to become emotionally attached to that result; and so, the more intensely and frequently one cherishes this interest, the more closely one becomes held in bondage to the result aimed at. Possibly this explains the fact stated by Dr. Funkhouser: that certain races absorbed others who had conquered them. The latter became interested in certain features or characteristics of their new subjects and gradually became absorbed,



through this interest, by the former. The Chinese consider themselves immortal, and already actually a part of the Deity. They are taught that the physical man is not the real man, but only the apparent one; consequently, they are taught to cultivate the psychical side of their nature as the more essential to hypnotism.

Dr. McLean said that as to those people operated upon with very little of the anesthetic, whether any effort was made to quiet them by means of suggestion she could not say. They were always exceedingly grateful to have the operation performed and were on their best behavior. She had seen no drunkenness except in the port of Yokohama. In Tokio she had seen no saloons, but they seemed to have about as many corner book stores there as St. Louis had saloons. "Dope" was forbidden in Japan.

Dr. McLean in reply to a question by Dr. Fleming, said that the percentage of nervous disturbances was

very small but tuberculosis was very prevalent.

In answer to a question by Dr. Goodloe, Dr. McLean said that in the ports there was a tendency on the part of the educated Chinese to try foreign foods. In the interior the diet consisted largely of vegetables and rice. The poorer classes ate pounded corn, grass seeds and roots. Rice for them was too extravagant. Their only meat consisted of pork and chicken. Milk they considered very disgusting and butter was nauseating. They believed chicken deadly to tubercular subjects, also eggs. The Chinese ate very rapidly. The boatmen could put away four large bowls of rice in four minutes.

Dr. Funkhouser said that he understood that it was the proper thing among the Chinese to belch frequently after eating.

Dr. McLean replied that this was true. Her party was given a dinner by a wealthy mandarin and they had made very strenuous efforts to appear polite in this matter.

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## EDITORIAL.

### PROGRAM.

The meeting at Jefferson City will be held in two sections, medical and surgical, and the Committee on program believe that at least 75 papers may be read. A preliminary program will be found in this issue; the regular program will appear in the April number. It is to be hoped that every County Medical Society in affiliation with the State Association will contribute to the scientific work. Titles of papers must be sent to the Secretary of the local society who will forward to the Chairman of the Committee on scientific work.

### MARCHING ONWARD.

The Missouri State Medical Association began the new year with 2050 members, 1124 more than when the Journal was established eighteen months ago. Since our last issue the Lawrence County Medical Society has been organized with 12 new members, thus increasing our membership to 2072. Lawrence county is situated in the 17th district, Dr. J. E. Tefft, Springfield, Councilor. It is to be expected that most county

reports for 1906 will show an increase in membership. Missouri has more than 6000 doctors, at least 4000 of whom are eligible to membership in the State Association. A continuous effort should be made to increase our membership until the state is thoroughly organized. Then may we expect to follow the example of New York and Pennsylvania in protecting our members in case of damage suits. This has been successfully done by the states named and as soon as our membership justifies the expenditure it is firmly believed the House of Delegates will insure each of our members the security enjoyed by members of other state medical associations.

### LAWRENCE COUNTY.

The Lawrence County Medical Society has just been organized at Aurora, Mo., with the following officers and members: President, Dr. J. A. Harris; vice president, Dr. F. S. Stevenson; secretary, Dr. C. A. Moore; treasurer, Dr. J. P. Andrews; board of censors, Drs. A. H.

Madry, C. W. Shelton, J. B. Fleming; members, Drs. J. A. Harris, Mt. Vernon; J. P. Andrews, Marionville; C. W. Shelton, Mt. Vernon; F. S. Stevenson, Aurora; J. B. Fleming, Aurora; A. H. Madry, Aurora; C. A. Moore, Aurora; W. W. Rodman, Pierce City; J. M. Painter, Mt. Vernon; E. C. Roseberry, Mt. Vernon; I. A. Cottingham, Aurora; J. A. Melton, Aurora; and J. Walker, Bethany. It is to be hoped the membership will be increased to twenty before March 1st, when the annual report will be made.

### THE AMERICAN MEDICAL DIRECTORY.

The American Medical Directory will differ from directories heretofore issued in three particulars: First, it will be a directory of the American medical profession published and owned by physicians themselves. Second, information regarding college and year of graduation and date of licensure will be verified from official sources. Third, it will furnish the same information regarding each physician, whether he be a subscriber to the directory or not. No paid-for information will be included. It will also combine in one volume the purpose of a general medical directory, as well as a medical society blue book, since the names of all members in good standing of the constituent state associations and their component branches will appear in capital letters, as a distinctive mark of such membership. Information contained in the directory regarding each physician will include name in full, year of birth, college and year

of graduation, office address and office hours. The assistance and cooperation of all physicians, and especially all members of the organized profession, is earnestly requested in carrying on and developing this work. The greatest service that any physician can render at the present time is to furnish, promptly and accurately, information regarding himself.

### PROPRIETARY MEDICINES, PATENT MEDICINES, NOS- TRUMS AND SÉCRET SYNTHETICS.

We must call attention to the confusion of terms so generally used in the literature upon the subject of proprietary remedies, patent medicines and nostrums. There is great need for clearness in the selection of terms which will definitely convey the intended meaning of those who speak or write upon this question, which has become such a live one to the general public as well as to the medical profession. The authority for the proper use of the words hereinafter defined is based upon the definitions given in the dictionary and the United States patent law. A proprietary medicine is an article which any person or firm has the exclusive right to manufacture or sell; which definition includes a medicine of known formula or published process of manufacture, as well as a medicine of unknown formula or secret process of manufacture. The word proprietary should only be used generically, and should never be limited in its application as a synonym of the word nostrum. Proprietary medicines include: I.



Patent medicines, all of which are of known process of manufacture; II. Pharmaceutical mixtures of known quantity and quality of ingredients; III. Nostrums, such as secret pharmaceutical mixtures, and the so-called synthetics, of secret formula protected by a trademark.

A patent medicine is a new and useful definite chemical compound of known formula, the process of manufacture is made public in the patent papers issued by the Government; therefore, all patent medicines are ethical. A nostrum is a medicine, the composition of which is a secret, a quack medicine, or any recipe of charlatan character.

The trademark protects a class of secret synthetics which are nostrums, they being secret mixtures of some coal-tar product, advertised with a formula such as C1, H2, N3, O4. They are not patented, because they cannot conform to the patent law which demands that they shall be new and useful, definite chemical compounds.

The public and the profession have a right to be protected from the fraud practiced by the exploiters of nostrums which represent the only class of medicines offered to the medical profession which should be condemned as an insult to its intelligence and honesty. Any internal or external medicine, the formula of which does not state the quantity of its ingredients, and in the case of a synthetic, which does not state the process of its manufacture, is a nostrum or secret proprietary medicine. All nostrums thrive on false statements as to their therapeutic value. And it is the nostrum or secret prop-

rietary venders who have profited by the confusion of terms used in articles written by the authorities in medicine, who should know better than to play into the hands of the nostrum people, who must be considered as parasites on individual and public health.

Within two years articles have appeared by able teachers of scientific medicine, which illustrate the confusion of terms referred to. Transactions of State medical societies and medical journals contain the articles from which the following quotations are made:

I. "The wide use of many proprietary pills or mixtures is distinct evidence of the great power of foolishness and fraud even when directly opposed to honesty and instructed wisdom."

II. "There are no hard and fast lines which separate patent from proprietary remedies. In their secrecy of composition and method of exploitation they are comparable."

III. "The patent medicines are more particularly directed to the lay public and therefore use the public press as the medium of advertising, while the proprietary literature is addressed more particularly to the medical public."

IV. "If there is any apology for the use of proprietary medicines, it must be due to some deficiency in the physician himself, either to his lack of knowledge of chemistry and pharmacology and physiology and clinical therapeutics, or to his inertia."

V. "The difference between a proprietary and a patent medicine is more apparent than real. There is

no good excuse for using these preparations."

These are fair extracts from the articles which do more harm than good, as many of the most valuable remedies used by physicians are proprietary medicines, and should not be condemned as nostrums. Many writers have strongly condemned the use of patent medicines in the face of the fact that all medicines now protected by a patent granted by our Government are ethical because the process of their manufacture is known. Recently an editorial and article have been published which distinguishes between a patent and a patented medicine; such a distinction is of recent origin, and if not killed in its infancy will surely lead to greater confusion than that which now exists in the minds of the profession and of the public.

The old prejudice against a patent medicine dates from the time when a prescription of a simple or compound mixture could be patented, but such mixtures have not been patented in many years, so that the patent medicines of today represent only new and useful definite chemical compounds, the patent covering the process of manufacture, and any competent pharmaceutical chemist, by following the process described in the patent, can reproduce the identical preparation found upon the market; but the patent protects against a commercial use of such published process, which in being made public meets every condition necessary to make a patent medicine ethical.

The subject of monopoly in drugs and other therapeutic agents is a sociological one, and not essentially a medical question. To use the word

"patent" as the synonym, and the word "patented" as the antonym of nostrum, as is being done by some of the workers in this field, is to increase rather than to clear up the fog which surrounds this important subject. The literature is full of such tautology as secret nostrums; the word "nostrum" means secret remedy, which makes qualifying it by the word "secret" equivalent to saying that *one should heed the voice of the vox populi*. The reader often leaves the several articles in the medical journals upon the question of proprietary remedies, patent medicines and nostrums, and the discussion of the subject as reported in the transactions of the several State medical societies, in a condition of mind best described as confusion worse confounded; which is largely due to the careless use of terms, and the questionable remedies suggested for this evil. It is not unusual to read in many of the discussions before medical societies, which have been reported within the past five years, such advice as: Why not limit the prescribing of physicians to the articles mentioned in the pharmacopoeia? Or should not the profession agree not to use any patent medicine; or that all proprietary medicines should be excluded from the advertising pages of medical journals, and should not be used by physicians? It is such advice which supplies the nostrum journals with the telling arguments in opposition to this great work, which is so often made ridiculous through misstatements and misunderstanding. The medical profession should be in possession of a criterion which should help it to decide which of the many

samples of medicines left in a physician's office should find their way to the trash-basket. Samples of secret mixtures, protected by trademark, but not patented, which are exploited as definite chemical compounds—or coal-tar synthetics—should be considered as an insult to the intelligence of every physician receiving them. The information about such articles, so often limited to the statement that they do not depress the heart, at once suggests that they are more or less dangerous mixtures of acetanilid exploited as definite chemical compounds with popular names valuable only as commercial assets. Often the workmen in nostrum manufactories who know the secret of some special mixture will exploit such mixture under new, popular names, furnishing formulas such as C5, H10, O20, N30, and then circularize and sample the medical profession, expecting physicians to accept such samples, and prescribe such nostrums or secret proprietary medicines, to their patients, which represent, as all nostrums do, fraud as to their composition, and false statements as to their therapeutic value.

To sum up: I. Proprietary remedies include ethical preparations and nostrums.

II. All medicines protected by a patent are ethical.



III. Nostrums include secret proprietary mixtures and secret synthetics protected by the trademark law.

All samples of secret medicines should be deposited in the trash-basket, as every scientific physician

should know the quantity of the ingredients in the mixture or mixtures which he uses, and should beware of secret synthetics.

The Council of Pharmacy of the American Medical Association has the courage of its conviction and is doing splendid work in educating the medical profession along the lines of scientific medicine, and away from the nostrum evil, and, with the cooperation of the *Ladies' Home Journal*, *Everybody's Magazine* and *Collier's Weekly*, the same thing is being done for the general public. By the study of pharmacology the United States Pharmacopoeia will come into more general use and scientific medication will be correspondingly advanced throughout the United States.—*Editorial N. Y. Medical Journal*.

In *Collier's Weekly* of December 2nd appears the fourth of the series


**BEWARE**  
 OF  
**ACETANILID**


*The following well-known "remedies," both "ethical" and "patent," depend for their results upon the heart-depressing action of Acetanilid:*

Orangeine	Megrimine	Ammonol
Bromo-Seitzer	Anti-Headache	Salacatin
Royal Pain Powders	Dr. Davis's Head-	Phenalgin
Miniature Headache	ache Powders	Cephalgin
Powders	Antikamnia	

*and practically all of the drug-store-vended "headache cures" and "anti pain" remedies.*

*Take no nostrum of this class without a doctor's prescription, unless you are sure it contains no acetanilid. Make the druggist tell you. He is responsible. A suit for damages has recently been won against a New York drug store for illness consequent upon the sale of a "guaranteed harmless" headache tablet containing three grains of acetanilid.*

of articles on the great American fraud. Every practicing physician



should read these articles in order that he may inform his patients upon this matter, if for no other reason. Probably at no time in the history of our profession has so much been done to educate the public relative to nostrums as during the past few months. Certainly the medical profession owes a debt of gratitude to *Collier's Weekly*, the *Ladies' Home Journal* and *Everybody's Magazine*. We reproduce a cut appearing in *Collier's Weekly* showing what *Collier's* thinks of acetanilid nostrums.

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## THE MEDICAL DEPARTMENT OF THE ARMY.

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The army today is officered for a strength of 100,000 men except the Medical Department, which is only sufficient for 42,000. As the Surgeon General has succinctly put the case: "The three primary duties of the Medical Department are (1) to preserve the effective strength of armies by military sanitation; (2) to care for the sick and wounded; (3) to conduct the administrative work of the department. To carry out these objects requires a highly specialized and complex organization, and a numerous trained personnel. Military sanitation is now recognized to be a well marked specialty in medicine, of which the average practitioner knows little more than he does of the methods of military medical administration. The second duty is that for which civilian physicians can be used to advantage, while the first and third must be, in the main, in the hands of trained medical officers in order

to secure efficiency, and to relieve the volunteer medical officer of the "red tape" which, while a necessary evil, is so burdensome and incomprehensible to men not trained to Government methods."

The bill which is now before Congress provides for an increase of medical officers from 320 to 450, exclusive of the Surgeon General. It reduces the length of service required in the grade of Lieutenant before promotion to Captain, from five to three years, in order to correspond with the requirements of the naval service. It increases the proportions in the higher grades to that existing for many years, prior to the reorganization of 1901, and nearly equalizes them with those existing in the Medical Corps of the Navy. It provides examinations to determine fitness for promotion up to include the grade of colonel. It provides a Medical Reserve Corps which shall constitute an eligible list of Medical Officers who shall have been examined, and commissioned if found fit, for service as medical officers with the rank of first lieutenant in case of war or other emergency. These reserve medical officers are intended to replace the contract surgeons, upon which the Medical Department depends for expansion when its numbers are found to be inadequate for the needs of the service, as, for example, when the army is raised to its maximum authorized strength of 100,000 men. They are not intended to in any way replace the volunteer medical officers.

President Roosevelt is fully alive to the importance of this matter, and in a message to Congress last

January, he said: "Not only does a competent medical service by safeguarding the health of the army, contribute greatly to its power, but it gives to the families of the nation a guaranty that their fathers, brothers and sons who are wounded in battle or sicken in camp shall not only have skilled medical aid, but also that prompt and well ordered attention to all their wants which can come only by an adequate and trained personnel. I am satisfied that the Medical Corps is much too small for the needs of the present army, and therefore very much too small for its successful expansion in time of war to meet the needs of an enlarged army, and in addition to furnish the volunteer service a certain number of officers trained in medical administration. . . . If the Medical Department is left as it is, no amount of wisdom or efficiency in its administration would prevent a complete breakdown in the event of a serious war."

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### OSTEOPATHY.

Osteopathy is defined and described in the New York Independent, November 9, 1905, by its originator, A. T. Still, of Kirksville, Mo., who explains, at first hand, many things of considerable interest to the medical profession. This peculiar medical cult has existed about 25 years, and was apparently doomed to death by inanition when it took on renewed life about 10 years ago, and has shown such phenomenal growth since then that it is the part of wisdom to examine into the reasons for its existence. From his

own statement, it is evident that Still began his work by one of those curious bits of illogic "reasoning" which, make up so much of the history of the world—which, indeed, have always had a tremendous influence upon the course of events—from the burning of witches to the vagaries of Mohammedan fanatics. He knew that the life of cells was dependent, among other things, upon the foods brought to them by the blood. This one true idea then became dominant and overpowered all others, and as soon as such a mental attitude was gained, the other steps were easy. There could be no other condition which kept cells alive, and deprivation of blood was the only cause of cell death—excessive heat, deprivation of heat, corrosives, toxins, traumatism, interference with nerve-supply, and all the thousand and one things which can cause death, were either forgotten entirely or were considered to be merely remote causes of obstruction of the circulation, or followed it. Then came the conclusion, "an unobstructed, healthy flow of arterial blood is life"—a definition which is phenomenal among all the thousands of attempts to define life—phenomenal, in that it proceeds from as clear an obsession as it is possible for psychology to furnish. THE

### OBSESSION IN OSTEOPATHY

thus became the center around which all subsequent thoughts arranged themselves in the effort to explain pathology on one principle. For instance, disease must be partial death due to partial blood obstruction. The mind then sought for me-

chanical causes of the obstruction, and the explanation hit upon involved the usual mental gymnastics familiar to all students of psychology—that is, it was not due directly to pressure on the vessels at all, but pressure upon the spinal nerves as they passed through the foramens of the spinal column. A slip or “dislocation” (now called subluxation) of a vertebra caused a pressure upon the blood vessels supplying the cord, and also pressed upon the nerves carrying “all the vital impulses between the cord and the viscera”—that is, the blood is no longer life, but the cord is; the vital impulses travel through the nerves and not in the blood. Tissues are not diseased by interference with their blood supply, but by interference with the vital impulses in the nerves. Life is now considered as something which passes out of the cord through the foramens—“through them went life.” The next step was inevitable—“at these foramens we find the seat of 95 per cent. or more of the lesions”—that is, these are mere mechanical causes of all diseases except the 5 per cent. due to unknown or unmentioned causes. The pressure is thus trebly effective—it deprives the cord of part of its life through pressure on its blood vessels; this diminished life is further dammed back by pressure on the spinal nerves through which it flows, but how this effects the blood supply of the diseased organs is not explained. The name osteopathy is thus to emphasize the theory that bone pressure causes all diseases.

THE SPREAD OF OSTEOPATHY is the thing to discuss, as it

is quite evident that the illogic and bizarre theory cannot be seriously considered, particularly as it states that postmortem examinations reveal the pressures and that relief of the pressure is curative. The matter is merely one of the thousands of illogic, baseless theories recorded in the history of medicine; it is the dogmatism which has always afflicted every science. The textbooks written by osteopathy are so full of unproved and unprovable assertions that any discussion of them is not possible. It is really pathetic in this age, but why does it not die? One reason for the success of the cult is no doubt due to the fact that the massage and joint movements are really beneficial, or perhaps even curative, in a certain percentage of chronic invalids who no doubt constitute the majority of its devotees. Suggestion also is probably responsible for improvement in the neurotic cases which flock to every new fad. Even frauds may have great success temporarily, but so far as known there is not the slightest hint of fraud in the origin of this curious dogma. The main reason for the spread of the delusion involves the same illogic conduct characteristic of it all. The textbooks truly assert that no one can practice this method unless he is thoroughly grounded in anatomy, physiology, and pathologic histology, to which we must add physics, chemistry, psychology, and all the branches of a liberal medical education, matters of several years of instruction. Nevertheless the graduates are turned out without the very instruction which is claimed to be essential. Hence, ignorant men,



wholly lacking the first essentials for the practice of osteopathy, are given diplomas certifying that they are competent. THE DEATH OF OSTEOPATHY can be safely predicted, and there is nothing to worry about. It will cure itself, for no system can stand if its professors are so ignorant. If they become learned they will not be osteopaths. No doubt many of them have been duped into taking up the alleged study and will drop it in time as they learn better; those who can not make a living at it will, of course, drop out, and the quacks who see in it a new field will work it as long as money can be squeezed out of a gullible public in this easy way. The licensing of osteopaths should not worry the public nor the regular medical profession. If they can pass an examination in the things which they declare essential to a knowledge of the cult, we should not object; and the public must insist upon such knowledge to prevent injurious massage by ignorant pretenders. No man will spend the time necessary for such learning and not be convinced that he must know more. So it is proper for our legislators to insist upon these men passing a regular examination, and when once that is demanded, the delusion will fade and finally disappear to join the hosts of departed fads. It will last some years yet, probably many years, but all the people can't be fooled all the time. The pathetic side of the origin of the delusion is the part of the matter which has been so strangely overlooked. As a subject for psychologic study, it is of considerable scientific interest. A systematized delusion is defended in

just the way this theory is explained.

THE LESSONS TO BE LEARNED FROM OSTEOPATHY are quite evident, and are the same old lessons learned from every other similar movement. Of course there is the chance for ignorant but honest men to attempt medical practice after a few months' training—a very old story; nor is there anything new to be learned from the creation of a new field for quacks. The potentialities for harm in these two classes are so great and so well known that it is really a waste of time to refer to them. Public safety demands that men permitted to treat any diseases must be learned men, at least learned in the parts they need—anatomy and all the other basic branches. Nor is there anything to be learned from the facts that this new fad offers a field for the use of suggestion in neurotic complaints—every bold assurance cure does that. A learned London physician has even shown that there are great therapeutic benefits in prayer in calming hypersensitive nerves and diminishing mental irritability. It is the reason why certain emotional religions, as distinguished from the cold reasoning ones, are so much more popular and beneficial to the nervous and emotional parts of the community. The real lesson from osteopathy, which the medical profession must learn, is the fact that massage and passive movements have a much wider field of usefulness than is generally supposed. It is a therapeutic measure often sadly neglected by the intellectual doctor who will prescribe a drug, but is not a mechanic in any

sense of the world. Such manual labor should not be impractical, though it apparently is. The average patient cannot afford a masseur and doctor, too, when he needs both. If the osteopath will confine his mechanical labors to the direction dictated by a learned physician, he might be of benefit indeed, but if he is to assure the public that 95 per cent. of all diseases are thus cured, he is a menace to public safety. There can be no compromise on that point, but it can never be an excuse for persecution of men, many of whom are honest, though fanatically deluded. Making martyrs of them will only perpetuate an illogic fad, which is sure to die of inanition in time. (Ed. Am. Med. Jan. 20th).

#### OBITUARY.

Dr. Putnam S. Fulkerson died at his residence in Lexington, Mo., December 16th, 1905. He was born in Lee county, Virginia, in 1827, came to Missouri in 1847 and located in Lafayette county, where he lived and labored until the end of his eventful life.

After some five years with his preceptor he took his first medical schooling in Louisville, Ky.

When a mere lad he began the practice of medicine with his preceptor, who was his uncle, Dr. James Fulkerson, of Virginia. After one year there, he came to Missouri, and located in Texas Prairie, Lafayette county, and practiced there until 1853 when he went to Jefferson Medical College and graduated from that institution in 1854.

On his return from Philadelphia, he located at Chapel Hill, Mo., and

there remained doing an active practice until the Civil War began.

He espoused the cause of the South and was appointed surgeon of General Joe Shelby's Brigade, in which position he served until the close of the war. He then located at Wellington, Mo., where he practiced until 1876, when he moved to Lexington, Mo.

In 1876 and 1878 was elected collector of Lafayette County, and from 1884 to 1888 he was postmaster in Lexington. While he held these offices he continued his professional work having his official work done by deputies.

Dr. Fulkerson was a careful, conscientious doctor; attentive to his patients, a careful, thoughtful reader, punctual to his medical societies, devoted to his profession and loyal to the highest medical ethics. He was a frequent contributor to medical literature and an occasional writer of verse.

He was frequently honored by his profession—was more than once vice president of the Missouri State Medical Association, was ex-president of the Kansas City District Medical Society and president from the time of its organization until his death of the Lafayette County Medical Society.

His broad and careful readings, his thoughtful experience and accumulated wisdom of sixty years, made him a strong doctor and a wise counselor.

Perhaps no man in Western Missouri did more to build up the moral and social status of his state, or who was more willing or more active in establishing a higher medical stand-

ard and professional ethics, than he. His constant work and devotion to his profession for more than half a century, together with his splendid social attainments, his genial bearings, his affable manner and his ethical methods made him a pleasant associate, a loyal citizen and a wise counselor. His virtues were "Positive and Progressive"—ever seeking to establish truth and destroy error; he was sympathetic, charitable and just. While unassuming in his bearings and modest

in his deportment he possessed the characteristics of true manhood. Though kind and tender in his manner, he carried at all times the "tenor and dignity of a gentleman."

In the passing of a character like this, his family lost a kind husband, and an indulgent father, the state a loyal citizen and the profession an honored and useful member. But out of his newly made grave springs the hope that dies not, of the beauty and splendor of a pure life.

N. P. W.



FORTY-NINTH ANNUAL MEETING  
of the  
MISSOURI STATE MEDICAL ASSOCIATION

Jefferson City, May 15, 16, 17, 1906.

PRELIMINARY PROGRAM.

Allen, T. C., Bernie, Malaria. Adams, J. Q., Belleview. Ball, J. M., St. Louis, Some Recent Advance in Ophthalmology. Barclay, R., St. Louis, A Method of Radical Relief of Cases of Deafness Long Abandoned as Hopeless; Illustrated by Reports from Actual Practice. Bartlett, W., St. Louis, Lessons to be drawn From Recent Operations on the Stomach. Buckwalter, J. C., St. Louis, Cough. Brown, Tinsley, Hamilton. J. H. P. Baker, Salisbury. J. D. Brummall, Salisbury. Campbell, B. O., St. Joseph, Ectopic Pregnancy. Chastain, E. N., Butler. Cordier, A. E., Kansas City, Non-Lithogenous Obstructions of the Biliary Ducts. Crossen, H. S., St. Louis, The Treatment of Fibroid Tumors of the Uterus. Davis, T. O., Maitland, Broncho-Pneumonia. Davis, E. P., Woodruff, Typhoid Fever. Dorsett, W. B., St. Louis. Edmonson, M. M., Kansas City, Some Remarks on the Treatment of Chronic Joint Disease. Elam, W. T., St. Joseph, Supra-Pubic Cystotomy as Preliminary to and as a Route for the Performance of a Considerable Number of Prostatectomies. Frankenburg, J. M., Kansas City, Rectal Abscesses. Frick, W., Kansas City, The Therapeutics of Eczema. Geiger, C. G., St. Joseph, Appendicitis. Gray, A. L., St. Joseph, The Use and Abuse of the Obstetrical Forceps. Wilson, Dora Green, Kansas City, The Present Status of Psychotherapy. Hertzler, A. F., Kansas City, The Treatment of Retroflexion of the Uterus. Hill, Roland, St. Louis, Obstructions of Small Intestines from Chronic Disease; with Report of Cases. Jarard, H., Pleasant Hill. Jurgens, H., Edina, Suppuration of the Superior Maxillary Sinus with Involvement of Ethmoidal Cells and Sphenoidal Sinuses. Kirchner, C. G., St. Louis, Surgical Aspects of Typhoid Fever. Lewis, C. O., Fayette, Albuminuretica. Lockwood, T. F., Bntler, Criminal Abortion; a Prevailing Evil Against the Unborn Generation. A National Crime Committed for Mere Social Promotions. Mark, E. G., Kansas City, Pyuria. McGinnis, H. F., Higginsville, Illegal Practice in Medicine. Miller, Sherman, Maysburg. Mitchell, C. M., Blythedale, State Medicine. Morrow, C. J., Kansas City, Syphilis of the Nervous System. Mussen, E. H., Rockingham, Ear-tire as a Factor in Disease. Norman, J. B., California, Intestinal Auto-Intoxication. Potter, T. E., St. Joseph, Tuberculous Disease of Joints. Saunders, St. Elmo, Kansas City, Surgery of the Liver. Seba, J. D., Bland, Spina Bifida. Stauffer, W. H., St. Louis, The Importance of Post-Operative Treatment in Diseases of the Rectum. Shy, M. P., Knobnoster. Triplett, J. S., Harrisonville, Medical Reformation. Von Quast, Ernst, Kansas City, The Limitations of Surgical Interference. Walter, F. E., Perry.

## COUNTY SOCIETY NOTES.

## BENTON COUNTY MEDICAL SOCIETY.

Benton County Medical Society met in regular session at Cole Camp on January 9th, the president, Dr. G. A. Greeson, in the chair. The attendance was unusually good, the following members being present: Drs. G. A. Greeson, Rhodes, Lemon, Walton, Schwald, Holtzen, Davis, and Dr. Snively, of Edmonson, visiting.

The society adopted the constitution and by-laws of the American Medical Association as prepared for county societies.

Dr. J. Walton read a paper on "Pneumonia." Dr. G. A. Greeson reported a case of fracture of the femur with fracture and impaction of the neck. Both paper and report proved interesting and were discussed freely by the members. Dr. Snively presented a case of gun-shot wound of the eye. The bullet entered the eye-ball rupturing the iris and destroying sight. Dr. Schwald presented a case of what was decided to be a malignant growth on the dorsum of the hand. After a free discussion of the case the society adjourned to meet in Warsaw on the second Tuesday in April.

S. O. DAVIS, Secretary.

## BUTLER COUNTY MEDICAL SOCIETY.

At the December meeting the attendance was good. The clinical program was passed over until the January meeting and the election of officers for 1906 was taken up, resulting as follows: President, J. J.

Norwine; vice president, A. W. Davidson; secretary, Ira W. Seybold; treasurer, B. C. Jones.

The following committee report was received and resolutions adopted:

We, your committee appointed to present resolutions concerning quackery, illegitimate practice of medicine, obstetrics and surgery, and the mailing of literature and sample medicine to the laymen of every land, all for the purpose of decoying the uninformed and unthinking classes into their clutches and obtaining their money without value received, and often causing or hastening their death, either directly or indirectly, desire, in behalf of these people, not only in our county, but every county in this broad land, to submit for your consideration the following resolutions:

Resolved, That our efforts should be crystalized as a county medical society in the endorsement of what has been published along this line by the *Journal of the American Medical Association* and various State Medical Journals and numerous high class periodicals, also the stand taken by the United States Army and Naval officers in the disbursements of pure food, skill and education of their departments, and whereas all this confronting the advancement and progress of this, the greatest period of education. Be it further

Resolved, It is our special duty to agitate this, a paramount question, not for any mercenary motives, but purely philanthropic, and urge every daily publication to use its in-

fluence in stamping out this heterogeneous class of thieves and life destroyers by which means we feel that a duty has been done which money could not procure. Be it further

Resolved, That as the literature accompanying nostrums advertised and exhibited for sale for all forms of disease is often deceptive, hurtful and immoral, that we respectfully urge upon our congressmen to formulate and support a law requiring that all patent and proprietary medicines shall carry an exact and complete formula of the contents of each package, bottle or prescription. And be it further,

Resolved, That the report of this committee be published in the JOURNAL MISSOURI STATE MEDICAL ASSOCIATION, and ask that similar action be taken in every county in the state, hoping that this spirit eventually may enter every county medical society in the land, and that these resolutions be recorded upon the minutes of this society.

J. J. NORWINE.

A. W. DAVIDSON,...

W. F. S. TAYLOR.

I. W. SEYBOLD.

B. C. JONES.

Committee.

Committees will be appointed and delegate and reporter will be elected at the next meeting, January 26th. The date of our meetings is the last Friday in each month.

J. J. NORWINE, Reporter.

#### CARTER-SHANNON COUNTY MEDICAL SOCIETY.

The Carter-Shannon County Medical Society met in regular session, January 9th, at Winona. The meet-

ing was called to order by Dr. Hyde. There were present Drs. Gum, Cotton, Hastler, Davis, and Drs. Fulton and Furber, who were elected to membership. Minutes of last meeting read and approved. An interesting clinical case—a dislocation of the head of the femur in a child 2 years old, due, as appeared from the history of the case, to traumatism, with, in all probability a congenital weakness of the ligaments of the joint, was presented to the Society, and the case carefully examined and discussed by the members. A very interesting paper on cholera infantum was read by Dr. Gum, and freely discussed. Also a paper on pernicious malaria by Dr. Hyde, and one on pneumonia by Dr. Cotton, were read and discussed with much interest by the society. An interesting case of dysentery in a two year old child was reported by Dr. Chilton.

Several questions of interest were discussed by the society, and withal, the meeting was characterized by interest and enthusiasm, and considered one of the most successful in the history of the society.

J. A. CHILTON, Reporter.

#### CHARITON COUNTY MEDICAL SOCIETY.

Chariton County Medical Society convened at 8:30 p. m. on December 21, 1905, Dr. Tatum in the chair.

Dr. Welch presented an interesting clinic. Dr. J. H. P. Baker read a paper on "Exophthalmic Goiter."

Dr. J. H. P. Baker and Dr. J. D. Brummal were selected to read papers at the annual meeting of the State Association in May next.



Dr. Brummak, chairman of the committee on year-book for 1906, presented an outline of the work suggested. On motion the report was adopted with necessary changes in the year-book.

Dr. G. W. Edwards of Brunswick, was elected to membership.

Officers for 1906 were elected as follows: President, J. R. Gaines; vice president, O. McEwen; second vice president, H. E. Kirkpatrick; secretary-treasurer, C. A. Jennings; reporter, W. L. Baker; censors, G. W. Hawkins, J. D. McAdam, C. H. Temple; delegate to State medical association, J. H. P. Baker.

There being no further business the society adjourned to the banquet hall where a dinner had been prepared for the members and their guests.

W. L. BAKER, Reporter.

#### CLAY COUNTY MEDICAL SOCIETY.

The regular meeting of Clay County Medical Society convened at Liberty on December 26th. Typhoid fever was the subject chosen for discussion and an able paper with that title was read by Dr. J. M. Allen. Drs. L. J. Jones, Marsh, Rice, Rothwell, Cuthbertson, Sevier and Mathews also took part in the discussion.

The next regular meeting will be held on January 29th.

W. H. MATTHEWS, Secretary.

#### GREENE COUNTY MEDICAL SOCIETY.

Greene County Medical Society met in Council Chamber at Springfield, January 6th, at 8 p. m., Vice

President Coffelt in chair. Minutes of previous meeting read and approved. Members present, Drs. Coffelt, Tefft, Ralston, Farnsworth, Matthews, Peake, Hunter, Ross, Cox, Bartlett, Fulton, Terry and Cowan.

Treasurer's report:

Cash on hands Jan. 12, '05...	\$149.29
Am't rec'd during year.....	121.00

Total .....	\$270.29
Am't paid out on warrants...	96.50

Cash on hands Jan. 1, '06...	\$173.79
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Report was received, and a committee composed of Drs. Fulton, Bartlett and Matthews appointed to audit the books.

The secretary's report is as follows: Number of members, 29; new members elected, 1; number of meetings during the year, 28; number of members present during the year, 283; number of visits by physicians not members, 23; average number members present each meeting, 10 3-28; number papers read and subjects presented, 8; cases reported, 25; discussions by members, 71.

The society, on March 4th, adopted a new constitution and by-laws, thereby becoming the Greene County Medical Society and became affiliated with the State society.

During the month of December the society lost by death one of its oldest and most honored members, Dr. C. C. Clements.

In reviewing the year's work, and comparing it with 1904 it is found in every particular, except the average attendance per meeting, the showing is much poorer for 1905 than 1904.

The library committee was given

further time for report.

Election of officers for the year resulted as follows: President, Dr. G. W. Barnes; vice president, Dr. J. C. Matthews; secretary, Dr. R. M. Cowan; treasurer, Dr. Farnsworth; member board of censors, Dr. Taft.

Motion to take Dr. Smith's resolution off the table was lost.

Dr. Smith gave notice that the following resolution would be offered next Saturday night:

Sec. 4, Chap. II of by-laws to be amended so as to read: "The regular meetings of this society shall be held on the second and fourth Friday night of every month except August; the hour of the meeting to be ordered by the society."

The secretary was authorized to buy what stationery was need for the use of the society.

#### MEETING OF JANUARY 16TH.

January 16th, Greene County Medical Society met in regular session, Dr. Barnes in the chair. Minutes of the last meeting read and approved. There was present, Drs. Barnes, Fulton, Matthews, Patterson, Smith, Cox, Farnsworth, Hunter, Ross, Coffelt, Camp, Woody, Fulbright and Cowan. Dr. Smith's resolution amending Sec. 4, Chap. II of by-laws to read: "The regular meetings of this society shall be held on the second and fourth Friday night of every month except August; the hour of the meeting to be ordered by the society:" was offered, and seconded by Dr. Farnsworth; resolution discussed by Drs. Matthews, Coffelt, Fulton and Ross. Resolution carried.

Committee to examine treasurer's books found same correct. Report received and filed and committee

discharged.

Motion carried to appoint committee of three to draw up resolutions concerning the death of Dr. Clements. Drs. Tefft, Camp and Farnsworth appointed. Application for membership of Dr. Oldham received and referred to board of censors. Bills presented from Bessie A. Knox, Springfield *Republican* and R. M. Cowan, allowed, and warrants drawn on treasurer for same.

Motion made and carried that the secretary be instructed to have change in by-laws inserted in printed copies of Constitution and By-laws, by stenographer.

Dr. Camp reported a case of a child with seeming abscess on each lid. Dr. Fulton reported case of pneumonia with complication. Cases discussed by Drs. Ross, Woody, Cox and Fulbright.

ROBT. M. COWAN, Secretary.

#### GRUNDY COUNTY MEDICAL SOCIETY.

Grundy County Medical Society met in regular session at the City Hall, Trenton, on January 16th, 1906. The meeting was called to order by the president, Dr. N. E. Sutton, at 8 p. m. The secretary being absent, Dr. R. G. Davenport was appointed secretary pro tem. Minutes of last meeting were read and approved.

Motion was made and carried that the president appoint three members of the society to frame an article designating what would be proper or improper language used in connection with patent medicines, nostrums, secret products or proprietary compounds advertised in any publication in Trenton, Missouri, or

the distribution of hand bills or pamphlets printed in or out of Trenton, Missouri, and distributed by carrier, or through any other avenue in the city of Trenton, State of Missouri. Then present to city council to be made an ordinance, imposing a fine as they see fit for violation of each and every act, by publication or distributor. This article to be reported at next meeting before going to the council

Drs. Davenport, Coon, Asher and Stewart were appointed to frame the article.

Motion made and carried that this society endorse the action of the St. Louis Medical Society in suppressing spurious advertisements in their city.

Motion made and carried that a committee of two be appointed by the president to ascertain if the article that appeared in our daily *Republican-Tribune*, December 20, 1905, in behalf of Drs. Bellows, Kimberlin and Punton of Kansas City, Mo., in regard to the removal of one Mrs. Berry's eye at the Punton Sanitarium, was gratis or paid. Drs. Asher and Davenport was appointed on this committee.

Paper by Dr. J. A. Asher: "Is Antitoxine of Value in Croup?" The paper was terse and to the point, establishing a clinical similarity of croup and diphtheria and regarding their difference due more to locality than anything else. Several cases of deaths were reported and also recoveries where the serum was used. In his opinion two conditions must exist to be of value. The resistance of the patient to the toxic effect of the disease great enough and the ability of surgical methods if

necessary to keep the air passages unobstructed long enough to admit the administration of large amounts of the remedy. The paper was discussed by Drs. Stewart, Coon, Sutton and Davenport.

It was generally agreed by the society to ask our theological institutions to have the patent medicine advertisements withdrawn from their Sunday school literature, etc. Adjourned to meet the 2nd Tuesday in February, 1906.

Dr. R. G. Davenport.

Secretary Pro. Tem.

### HARRISON COUNTY MEDICAL SOCIETY.

Harrison County Medical Society met in regular session at the office of Dr. Guinn on January 16th. The President, Dr. A. H. Vandivert, called the meeting to order. Dr. Wiley, the secretary, was unable to be present on account of illness and Dr. Guinn was chosen secretary pro tem. The following members were present: Drs. Broyles, Walker, Mitchell, G. E. Guinn and Vandivert. Dr. Mitchell read a paper on "Modified Smallpox and Vaccination" in which he directed special attention to the subsequent treatment of vaccination. The paper was a splendid essay on this subject and the discussion was general. Dr. C. M. Mitchell was chosen to prepare a paper for the state meeting, the subject to be "State Medicine". The delegate to the state meeting will not be chosen until it is known who can attend. Two physicians in Harrison County have had their license to practice revoked on account of promiscuous prescription writing. The uncompromising prosecuting attorney of Harrison county, Mr. S. P. David-



son, has put the lid on very tight so that it is pretty risky for a physician to write promiscuous prescriptions for whiskey.

W. H. WILEY, Secretary.

### HOLT COUNTY MEDICAL SOCIETY.

The Holt County Medical Society met in the office of Dr. Williams at Maitland, on January 4th. In the absence of the president the vice-president, Dr. Williams, called the meeting to order. Dr. F. E. Hogan of Bigelow was elected to membership. While the attendance was not quite as large as usual, there was no lack of enthusiasm, and the meeting was considered the best in the history of the Society. There was much fraternal spirit shown and harmony prevailed throughout all the proceedings. The matter of organization took precedence in debate and many plans were suggested for bettering the organization and harmonizing the profession throughout the county. The matter of collections was discussed and plans suggested to make the "slow" one come forward. A fee bill was presented and adopted as a guide that there might be more uniformity in making charges for services. Dr. B. T. Quigley of Mound City was elected a delegate to the meeting of the State Association and Dr. F. E. Bullock of Forest City alternate. Dr. T. O. Davis read a paper on "Broncho-Pneumonia". This paper covered a period of several year's experience by the author and was timely and to the point. For lack of time the remainder of the program was continued till next meeting which will

be held at Mound City, April 5th. The following names will appear on the program for the April meeting: P. D. Kelley, J. M. Miller, J. F. Chandler, Ira Williams and J. M. Davis.

J. F. CHANDLER, Reporter.

### JACKSON COUNTY MEDICAL SOCIETY.

The Jackson County Medical Society held its regular meeting Thursday January 11th, 1906, the president Dr. E. H. Thrailkill in the Chair.

The following resolutions were adopted by unanimous vote of the Society:

Whereas, The general press has aided and abetted the use of nostrums and "cure alls" which are well known to contain a large per cent of alcohol; and whereas, The medical profession recognizes and deplores the danger of the indiscriminate use of such deceptive and powerful medicines; be it therefore Resolved, That the Jackson County Medical Society express its hearty approval of the firm stand taken by the editors of the *Ladies' Home Journal* and *Collier's Weekly* upon this important matter; be it further Resolved, That these resolutions be spread upon the minutes of the Society and that a copy be forwarded to the editors of *The Ladies' Home Journal* and of *Collier's Weekly*. Whereas there is in our own midst a remedy which calls itself a "bracer" and boldly declares its endorsement by the profession; be it Resolved, That this Society denounce such advertisements as most dangerous to the public welfare, a libel on the noble

profession of medicine.

(Signed) ERNST VON QUAST, M. D.

At this meeting, three new members were received and nine applications for membership, were referred to the membership committee.

The annual address of the president, Dr. E. H. Thrailkill, preceded the scientific program which consisted of a very interesting paper by Dr. C. B. Hardin entitled, "Some Thoughts on Infection, with Special Reference to Secondary Affects on the Heart."

After a consideration of the general subject of the process of infection, of immunity, and of the pathogenetic property of bacteria, the essayist dwelt at some length upon the manner in which the heart becomes involved in acute infections, upon the precursors to organic changes when the latter occur, and upon the therapy of cardiac involvements.

In the first place, as to infectious diseases, he stated that no germ was inherently pathogenic; that it became so only when the condition of a tissue favorable for its development and action there existed. As was the case in many other diseases, so in an infectious process the power of resistance of the individual and therefore of the heart, determined the degree or type of heart implications.

In nearly all instances of continued infection, he said, the heart became involved secondarily; it mattered not whether the process was a septicaemia, toxaemia, or pyemia, the results upon the heart structure might be the same. Again, in infectious diseases predisposition to

heart involvement lay in deficiency of structure such as congenital weakness, malformations, or any other condition lessening tissue resistance. As to treatment of heart complications, he declared that it should be the aim of the physician to arrest inflammation of heart structure before degenerative processes began; however the latter were in many instances inefficient attempts on the part of nature to restore heart integrity. The essayist stated, in reference to the prophylaxis of cardiac complications in infectious processes, that much could be gained by attempts to restore normal tissue activity and nutrition by permitting the patient to get about as early in convalescence as was compatible with safety; this should never be practised, however, when a crippled heart has already developed. Thus one made the efforts to prevent rather than to cure the heart involvement.

The discussion of this paper was opened by Dr. O. L. M'Killip, Drs. C. C. Conover, D. R. Porter, J. Q. Chambers, Howard Hill, H. C. Crowell and James Thompson also taking part; Dr. Hardin closed the discussion.

Owing to the late hour, a paper by Dr. W. H. Coffey, on "The Prophylaxis of Rectal Diseases," was postponed until the next meeting of the Society.

New members: Drs. Chas. William Gosney, 718 Shukert Bldg.; Noel E. Lake, 14th and Summit Sts.; Eugene Pierre Mallett, 12th and Wyandotte Sts.; R. W. Holbrook, 224 Bryant Bldg.; E. L. Harrison, 621 East 30th St.; W. H. Case, 2203 Lister Ave.;



Orval J. Cunningham, 305 Altman Bldg.

MAX GOLDMAN, M. D., Secretary.

### JASPER COUNTY MEDICAL SOCIETY.

The Jasper County Medical Society met in regular session in the parlors of the Young Men's Christian Association, on Dec. 18th. Dr. A. B. Freeman presiding. The following members were present: Drs. Freeman, Pifer, Shelton, Miller, G. W. Clark, Lanyon, Bachelder, Kelso, Neff, Blackwell, Matthews, and James. The minutes of the previous meeting were read and approved. The application of Dr. G. W. McClure, of Carterville, was received and tabled and referred for action. The annual election of officers was then held. For President, Dr. J. D. Pifer received greatest number of votes. Moved and carried that Secretary be instructed to cast vote of members present for Dr. Pifer. Dr. J. W. Clark, of Carterville, was elected vice-president in like manner. Dr. J. W. James was re-elected Secretary, Dr. G. W. Miller was re-elected Treasurer. Dr. R. L. Kelso was elected to serve three years on the Board of Censors; Dr. M. B. Kincheloe for two years; Dr. L. I. Matthews for one year. Dr. R. L. Neff was elected delegate, and Dr. L. I. Matthews as alternate. The report of Secretary for the year 1905 was read and accepted.

On the invitation of the incoming President, Dr. J. D. Pifer, the Society adjourned to the House of Lords cafe and were treated to an informal luncheon.

R. M. JAMES, Secretary.

### MEETING OF JANUARY 10TH.

The Jasper County Medical Society met in regular session in the parlors of the Young Men's Christian Association at 8.30 p. m. with Dr. J. D. Pifer in the chair. The following members were present:—Drs. Pifer, Clark, Lanyon, Shelton, Matthews, Snyder, Grantham, Neff, Miller, S. H. Bachelder, Freeman, Kelso, and James; Dr. F. L. Anderson visiting.

Dr. A. R. Snyder read a very interesting paper on "Acute Articular Rheumatism." The doctor laid special stress on the old treatment of fifty years ago, such as "the alkalies, between blankets, forced rest, etc." The paper was freely discussed by most of the members present. The board of censors reported favorably on the application of Dr. G. W. McClure, of Carterville, and the Secretary was requested to cast the vote of members present for Dr. McClure.

Program for next meeting:—Dr. M. C. Shelton. —Paper—"Albuminuric Retinitis." Dr. W. H. Lanyon offered the following resolution. Resolved:—That we view with disfavor the appearance of advertisements of propriety remedies, that have been condemned by the committee of the American Medical Association in the JOURNAL OF MISSOURI STATE MEDICAL ASSOCIATION. The resolution was unanimously adopted.

### LACLEDE COUNTY MEDICAL SOCIETY.

The regular meeting of the Laclede County Medical Association was held in Lebanon, Monday afternoon, January 8th, with Dr. J. M. Billings, president, in chair. The



board of censors reported in regard to illegal practitioners in the county and instructions were given for the investigation of these practitioners and for action against them. A paper on "Acute Lobar Pneumonia" was read by J. A. Pinckard, and the discussion which followed brought out many suggestions as to the treatment, veratrum and aconite receiving their full need of praise. Acute intestinal troubles will form the basis for discussion the next session.

The following officers for the year were elected. President, J. C. Jacobs, of Conway; vice presidents, J. M. Billings, and T. B. Herbert, Lebanon; secretary and treasurer, P. L. Pritchett, Lebanon; board of censors, J. M. Billings, J. A. Pinckard, and J. A. McComb; delegate to the State Association Convention, J. A. McComb.

P. L. PRITCHETT, Secretary.

#### LINN COUNTY MEDICAL SOCIETY.

The Linn County Medical Society met in regular session at Laclede, January 9th, the President, Kathryn Standley in the chair. The following officers were elected for the ensuing year: Dr. J. W. Mason, president, Brookfield; Dr. C. E. Jenkins, first vice-president; Dr. Ola Putnam, second vice-president; Dr. J. L. Burke, treasurer, Laclede; Dr. Foster Burke, secretary, Laclede; Dr. D. F. Howard, delegate, Brookfield. Dr. J. L. Burke, treasurer, submitted his report, showing balance on hand of \$39.20. Report was approved.

Application of Dr. John T. Stevenson of Laclede, for membership was approved. A committee consisting

of J. L. Burke, Laclede, J. W. Lane, Linneus, and U. C. Dryden, Purdin, was appointed to advise with the county court in regard to the appointment of a county health officer. The following papers were read: Dr. T. P. Oven "Veratrum Viride"; Dr. J. L. Burke "Report of a Case of Induced Abortion to Relieve Vomiting of Pregnancy"; Dr. Z. T. Standley "Report of a Case of Attempted Abortion"; Dr. C. E. Jenkins, "Osteopathy".

The next meeting will be held in Meadville on Tuesday, April 10th.

F. HOWARD, Reporter.

#### LIVINGSTON COUNTY MEDICAL SOCIETY.

The Livingston County Medical Society held its regular meeting in Fraternal Hall, this city on January 10th. Dr. D. Gordon presiding. This being the annual meeting the following officers were elected for 1906: Dr. L. E. Tracy, of Chillicothe, President; Dr. F. P. Batdorff, of Farmersville, 1st vice president; Dr. R. W. Murray, of Dawn, 2nd vice president; Dr. J. F. Cherrington was re-elected secretary, and Dr. B. N. Stevens of Chillicothe was re-elected treasurer. Dr. R. Barney was elected delegate to the state meeting at Jefferson City next May; Dr. H. M. Grace of Chillicothe, alternate. The board of censors for 1906 are Dr. F. P. Batdorff, Dr. H. N. Carver, and Dr. R. H. Cabbell.

Under the scientific program Dr. F. P. Batdorff not being present sent his paper on "Ergot, Its Dosage and Indications Other Than in Obstetrical Practice." This was a very meritorious paper and was discussed and complimented freely by the mem-

bers. Our next meeting will be held on the second Wednesday in April.

The Post-graduate Medical Society of Chillicothe still continues to grow in interest and at our last meeting on January, 4th, we had an able and interesting lecture from Dr. Levi E. Tracy upon the subject of "Why we Should use Alkaloids instead of Galenicals." On the 18th, our next meeting, we will have clinical experiences from Dr. H. N. Carver upon "Tumors of the Uterus and its Appendages," or a lecture from Dr. J. F. Cherrington upon "Electricity in Pelvic Diseases." J. F. CHEERINGTON, M. D., Reporter.

#### NODAWAY COUNTY MEDICAL SOCIETY.

The annual meeting of Nodaway County Medical Society convened at Maryville on January 11th. The meeting was called to order by the president, Dr. F. R. Anthony. Minutes of the last meeting were read and approved. The following program was carried out: Paper by Dr. J. W. Dean, "Acute Otitis Media"; discussion by Drs. Bradbury, Nash, Wallis, Martin and L. E. Dean.

Dr. H. L. Saylor talked on the various phases of scarlet fever. Discussion of this subject was participated in by Drs. Nash, Martin and Barnett. The following members were present: A. B. Allen, J. W. Dean, G. A. Nash, C. Ellis, F. C. Wallis, F. R. Anthony, L. E. Dean, F. M. Martin, R. M. Bradbury, Edwin Powell, H. C. Goodson, H. L. Saylor, E. L. Crowson, M. A. Gaugh, A. D. Barnett, C. F. Howell, John Cox. The Society adjourned to the Elk's Club Rooms where a banquet

had been prepared by the members to which all the physicians in the county and their wives were invited. Dr. J. W. Dean responded to the toast "The Physician" and Dr. J. A. Nash replied to the toast "The Surgeon". The evening was thoroughly enjoyed by all in attendance.

L. E. DEAN, Secretary.

#### ST. LOUIS MEDICAL SOCIETY

Meeting of December 30, 1905—After the reading of the minutes, and reports of officers and committees of 1905, the Society proceeded to the election of officers to serve for the ensuing year, which resulted as follows: George Homan, president; Robert Barclay, vice president; Hart Goodloe, recording secretary; Edmund A. Babler, corresponding secretary; Charles J. Orr, treasurer. The following committees were appointed: Elections, Thomas A. Hopkins, chairman; Walter Baumgarten, Julius H. Gross. Publication and Debate: George M. Tuttle, chairman; Hudson Talbott, Albert E. Taussig. Executive: John C. Morfit, chairman; Davis Forster, John Green, Jr. Library: James Moores Ball, chairman; M. W. Hoge, Mary H. McLean. Microscopy and Pathology: Albert E. Meisenbach, chairman; William W. Graves, William H. Mook, E. F. Tiedemann, Louis M. Warfield. Public Health and Legislation: Clarence M. Nicholson, chairman; Hugo W. Bartscher, Robert Luedeking.

There were 237 members present at this meeting.

Meeting of January 6th, 1906.—The new president, Dr. Homan delivered a very appropriate address,



after which the minutes of the previous meeting were read and approved: eight physicians were elected to membership and several committees reported.

Dr. Gellhorn showed a two-months pregnant uterus complicated by a large uterine fibroid, which he had removed that day. He also gave a history of the case.

Dr. G. Wiley Broome, read a paper entitled "The Present Position of the Surgery of Carcinoma of the Cecum with Report of Cases." The doctor is very pessimistic in regard to this class of cases and made the statement that no case of this kind is ever cured; that radical operation is not justified—all that surgery can do is to palliate by relieving obstruction, which should be done by the simplest operation to accomplish the result. He reported four cases. The paper was discussed by Drs. Brown, Moore, and Kieffer.

#### MEETING OF JANUARY 13.

After the reading of the minutes and disposal of the regular routine business, Dr. Willard Bartlett read a paper entitled "Eight Selected Cases Representing Two Different Phases of Gall Stone Disease." Dr. Bartlett first gave the history of four cases illustrating that class in which there are few, if any, of the diagnostic symptoms present, and are usually first diagnosed at autopsy, or are found while operating for some other condition." He thinks that a diagnosis could be made in a larger per cent of these cases, if one would carefully consider the history and predisposing causes. A history of long continued digestive disturbances not benefited by treatment, should lead one to suspect gall

stone. The predisposing causes are, age, sex, (women being more liable) frequent child-bearing, obesity, and any disease which causes ulceration and thus lessens peristaltic action of the intestines. He then gave the history of four cases illustrating that class in which the common duct is obstructed, and in which we have the classical symptoms, viz., colic, tenderness in right hypochondriac region, jaundice and rise of temperature. He made a plea for the early diagnosis and operation, saying that the operation in the first class of cases is a very simple matter, while removing a stone from the common duct was once of the most difficult of all abdominal surgery. The paper was discussed at length by Drs. Myer, Brown, Blair, Kieffer, Morfit, Funkhouser and others.

Dr. J. Y. Brown presented four cases on which he had operated; two gastric ulcers, one cancer of stomach, and one, gunshot wound of stomach and liver. He gave an interesting talk on stomach surgery. He also emphasized the importance of early diagnosis and operative interference in this class of cases, and urged the general practitioner to visit the operating room more frequently. The cases were discussed by Drs. Myer and Bartlett.

J. E. GRAHAM, Reporter.

#### ST. LOUIS COUNTY MEDICAL SOCIETY.

The regular meeting of the St. Louis County Medical Society was held at Clayton, January 10th, with Drs. Carter, Koch, Townsend, Denny, Thurman, Hanpeter, Randle, Wyer, Reynolds, Heidorn, Jensen and Moore present. During the ab-



sence of President Carter, and Vice President Guibor, at the opening. Dr. E. J. Thurman was elected chairman pro tem.

The Committee on Elections and Ethics failing to report H. G. Wyer moved to suspend by-laws temporarily and vote on the admission to membership of Dr. P. M. Brossard of Maplewood and L. F. O'Brien, of Sappington.

Motion carried, and both gentlemen were elected members. Dr. Thurman surrendered chair to Dr. Carter, who in an interesting address outlined the work for the current year. He advanced some interesting and excellent ideas concerning the value of membership in the County Society and the best uses to which it may put, with mutual benefits resulting.

He advocated a circulating medical library, and urged the members to make efforts in scientific medical research.

H. G. Wyer, Howard Carter and E. J. Thurman were elected censors.

R. D. Moore was elected reporter to the JOURNAL.

Dr. W. L. Townsend read an excellent paper on La Grippe, which was discussed by a number of members.

The chair announced the following committees—Program: Howard Carter, R. D. Moore, F. E. Guibor. Public Health and Sanitation: John Pitman, R. M. Higgins, W. L. Townsend. Meeting Place: O. W. Koch, H. G. Wyer, S. H. Reynolds. Printing: N. N. Jensen, W. R. Hanpeter, R. B. Denny.

R. D. MOORE, Reporter.

## ST. GENEVIEVE COUNTY MEDICAL SOCIETY.

The St. Genevieve County Medical Society held its regular monthly meeting on January 10th at the office of Dr. Hinck, the President, Dr. Moore, in the chair. There was a fair attendance of members. The minutes of the last meeting were read and approved. Dr. Rutledge spoke on some of the evils that creep in when proprietary preparations are prescribed in original packages.

The committees and a delegate were appointed by the president to serve for the ensuing year.

Letters were read concerning the conduct of Dr. Guido Schaff and referred to the proper committee.

The application of Dr. J. A. Wilkins, of St. Mary for membership was reported upon favorably and he was duly elected. President elect Moore's address to the Society was greatly appreciated by those present and on motion it was ordered filed with the secretary. No further business appearing the society adjourned until the 2nd Wednesday in February.

R. W. LANNING, Secretary.

## STODDARD COUNTY MEDICAL SOCIETY.

The regular bi-monthly meeting of Stoddard County Medical Society was held at Bloomfield on January 3d. There was only a small number of members present owing to bad roads. Dr. D. R. Corbin, retiring president, entertained the members with a bountiful repast which was highly appreciated. Dr. T. C. Allen, president-elect, was pre-

vented from attending, much to the regret of all present. This is the first meeting since the organization of the Society which Dr. Allen has failed to attend.

At one P. M. the society was called to order by Dr. Corbin with the following members present: Drs. Ashley, Corbin, Evans, Edmore, Phillips, Turnbaugh, Wingo and Vernon. The minutes of the previous meeting were read and approved. Dr. T. B. Wingo reported a case of "Post Pharyngeal Abscess". When the case was first seen it was impossible to make a positive diagnosis, but on a second visit it was determined that pus was present and an incision to the right of the medium line was made. This was followed by a free discharge of thick fetid pus. The patient refused to take an anesthetic or allow any further operative treatment although this was advised in order to render the abscess cavity free from carious bone. Later there developed two openings on the outside of the neck which discharge small spiculae of bone. The patient was wasting rapidly. No microscopic examination of the discharge was made, but the history and clinical symptoms point to a tubercular disease of the vertebrae. This case was discussed by Drs. Evans, Turnbaugh and Corbin. Quiz was postponed until the next meeting.

Dr. John Asley read a paper on "The Nostrum Evil; the cause and Cure". He thought the profession was largely to blame for the general use of nostrums by the people and that often there was a distinction without a difference in some of them. He suggested that physicians should know more of the contents of

these preparations in order to enable them to give the public good reasons for refusing to use them. He did not approve of the promiscuous use of ready made preparations as he believed this tended toward getting into "ruts". Many times a single remedy or a combination of remedies prepared at the time would meet the indications far better. He spoke of the various methods that had been advocated to meet the evil and suggested some new thoughts for the consideration of the Society. In opening the discussion Dr. Vernon said that as long as the Journal of the American Medical Association and our own Journal carried objectionable advertisements it would be difficult for the physicians themselves to counteract the evil to any extent. The subject was further discussed by Dr. Wingo and others. The next meeting will be held at Bloomfield at one P. M. on the first Wednesday in March.

GEORGE W. VERNON, Reporter.

#### WORTH COUNTY MEDICAL SOCIETY.

The Worth County Medical Society gave their first annual banquet on Wednesday evening January 10th. The occasion was one that will long be remembered by the doctors and their wives and sweethearts, as the banquet was a success.

D. E. H. Miller, of Liberty, Mo., district counselor, delivered the address of the evening at the First Presbyterian church, and it was the finest address ever given in our city along medical lines.

The Grant City Orchestra under the direction of Prof. R. G. Gruber furnished the music.

After the entertainment the doctors and their wives went to the Spafford House, where the genial host, Mr. Wilber McReynolds, had prepared an elaborate menu for his guests.

Immediately following the banquet, the following toasts were proposed:

Uses and Abuses of Remedial Agents," Dr. T. J. Smith; "Dentistry in Relation to Medicine," Drs. S. C. Davidson; "The Doctor's Wife," Dr. John Andrews; "Con-

sultation," Dr. W. E. McKinley; "Care of Teeth," Dr. F. E. Thomas; "Beaumont," Dr. H. P. Mills; "J. Marion Sims," Dr. J. K. Phipps; "A Tooth," Dr. Wilson.

Editors Dillon and Garver were the invited guests of the society, and were called upon for short addresses.

Dr. O. P. M. Mills had charge of the arrangements for the banquet and deserves great praise for making it such a successful affair.

J. K. PHIPPS, Secretary.

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## BOOK REVIEWS.

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A Text Book of Operative Surgery. Covering the Surgical Anatomy and Operative Technic Involved in the Operations of General Surgery. Written for Students and Practitioners. By Warren Stone Bickham, M. D., Phar. M., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York; Late Visiting Surgeon to Charity Hospital, New Orleans, etc. Handsome octavo of 984 pages with 559 illustrations, entirely original. Philadelphia, New York, London. W. B. Saunders & Company, 1905. Cloth, \$6.00 net; Sheep or Half Morocco, \$7.00 net.

That the first edition should be exhausted in six months is evidence of the appreciation of the author's work by the profession. Too brief a time has elapsed since the appearance of the original edition to introduce any radical revision, how-

ever, numerous minor changes have been made. This work completely covers the surgical anatomy and operative technic involved in the operations of general surgery. The work presents the best technic of modern surgeons in the operations mentioned with a brief summary of the descriptive and surgical anatomy of the structures involved. It is constructed on thoroughly new lines, the subject being remarkably systematized and arranged in an original manner. The subjects have been grouped under: The Operations of General Surgery: (Part 1), and, The Operation of Special Surgery (Part 2). The progressive steps of the various operations are detailed with unusual clearness with 559 magnificent illustrations, which at the same time represent the highest artistic skill and excellence. The illustrations are particularly helpful



in that the bones, muscles, etc., are clearly indicated together with lines of incision. The text is fully up to date with the advance of surgery, all recent improvements in technic being fully discussed. It is a most excellent work and helpful alike to both students and practitioners.

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Genito-Urinary Surgery and Venereal Diseases, by J. William White, M. D., John Rhea Barton Professor of Surgery, University of Pennsylvania, and Edward Martin M. D., Professor of Clinical Surgery, University Pennsylvania. Illustrated with Three Hundred Engravings and Fourteen Colored Plates. Sixth Edition, J. B. Lippincott Co., Philadelphia.

This sixth revision is in accordance with the latest teaching and practice in this branch of surgery. All the latest improvements in technic are added. Many new illustrations have been inserted and some of the sections re-written. As in the former edition it has been the aim of the author to make the volume one of practical use to the busy physician. Much space has been devoted to symptomatology, diagnosis, and treatment, while the pathological characteristics are briefly discussed. Technic, both operative and manipulative, is given in detail; emphasis is laid on the study of urine and its constituents produced by disease. The book is much improved and its teachings, direct, clear and practical, thorough and up to date, in every detail. The stress laid on differential diagnosis is a very strong feature. Another strong point is the index

which is the most complete of its kind.

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Transactions of the New Hampshire Medical Society at the One Hundred and Fourteenth Anniversary, held at Concord, May 18 and 19, 1905. Ira C. Evans Co., Printers, Concord, N. H. The following are some of the papers read and reported: The Premonitory Symptoms of Insanity and Their Significance, by Albert E. Browning, M. D.; Malingering, by M. B. Sullivan, M. D.; Acromegaly, by M. T. Stone, M. D.; Case of Tetanus Treated with Antitetanic Serum, by N. W. McMurphy, M. D.; Orthopedic Operations and the Treatment of Flat-Foot, by George C. Wilkins, M. D.; Thrombosis and Embolism, with a Report of Two Cases, by P. H. Greeley, M. D.; Cerebro-Spinal Meningitis, by G. M. Davis, M. D.; Purulent Conjunctivitis, by H. D. W. Carvelle, M. D.; Report of Operations on Two Cases of Extra-Uterine Pregnancy with rupture, by George A. Tolman, M. D.; The Toxemia of Pregnancy, by Herbert L. Taylor, M. D.; Danger Signals and Beacon Lights in Gynaecology, by H. L. Stickney, M. D.; Medicine, Theology and Superstition, by J. Elizabeth Hoyt, M. D.; Contract Medicine, by James T. Greeley, M. D.; An Operation for Cleft Palate, by H. L. Smith, M. D.; Dysmenorrhoea as Associated with Antelexion of the Uterus, by David W. Parker, M. D.

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Transactions of the South Dakota State Medical Association for the year 1905. The Transactions

have just come to our desk contains many interesting papers and discussions, and the report of the proceedings gives credit to an active and progressive association. Some of the papers reported are: Treatment of Lobar Pneumonia, by Dr. E. T. Ramsey; Mixed Infections in Acute Diseases of Children, by Dr. J. L. Stewart; Acute Articular Rheumatism, by Dr. C. W. Hargens; Anesthesia, General and Local, by Dr. J. L. Foxton; Peritonitis, with Report of Fatal Cases, by Dr. H. J. Rock; Drainage in Diffuse Septic Peritonitis, by Dr. VanBuren Knott; Hypertrophy of the Lower Turbinates, by Dr. R. D. Alway; Surgery that the Country Doctor Should Do, by Dr. L. J. Townsend; Phimosis, by Dr. J. F. D. Cook; The West as a Field for the Woman Physician, by Dr. Anna R. Baker; Treatment of Typhoid Fever, by Dr. G. F. Jewett.

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A compend of Medical Chemistry, Inorganic and Organic, including Urinary Analysis. By Henry Leffmann, A. M., M. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, and in the Wagner Free Institute of Science. Fifth Edition—Revised. \$1.00. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

This revised Fifth Edition is well arranged, full, concise, and up to date. It is thorough and in a condensed practical form making it doubly valuable to the busy student. It is based not on one text-book but on the most popular text-books and lectures of prominent professors making it available to students of all colleges. It is not intended to

take the place of the text-books but as an aid to students making the taking of voluminous notes unnecessary. It is of value to the practitioner on account of the clearness, conciseness, and correctness of its statements. The subject matter is arranged as to: 1st, General Principles; 2nd, Descriptive Chemistry; 3d, Organic Chemistry; 4th, Clinical Chemistry; 5th, Table of Element.

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Differential Diagnosis and Treatment of Diseases. A text-book for Practitioners and advanced Students. By Augustus Caille, M. D.; Fellow of the New York Academy of Medicine; Member and Ex-President of the American Pediatric Society; Professor of Diseases of Children; New York Post-Graduate Medical School and Hospital; Visiting Physician to the New York Post-Graduate and German Hospital; Consulting Physician to Isabella Home and Hospital, etc. With two hundred and twenty-eight illustrations in the text. D. Appleton and Company, New York.

The author has taken a departure from the well defined method in writing medical books. It brings the domain of practical medicine within the grasp of the family physician and will be a great aid to the advanced student in acquiring a clinical foundation. A strong attempt has been made to reestablish the relations between internal medicine and surgery, therefore special methods from the view-point of the general clinician are given, believing that the presentation and many methods of diagnosis and treatment worked out by the specialist should

be common property to the profession. Exhaustive and theoretical details are avoided but on the other hand offers much practical clinical experience which will enable the practitioner to make use of the practical details of his art at the bedside. Prominence has been given to hygienic, prophylactic, dietetic, hydrotherapeutics and physical method of treatment, while throughout the book are distributed many well tried formulae. There are special chapters on the technique of Diagnosis and Laboratory Aids, on paediatrics, on diseases of the Osseous, Muscular and Articular System, on Nutrition and Diet, on the Management of Dropsy and Effusion, on Massage, Vibration, Dry Hot Air Treatment, Poisons and Anesthesia. Each chapter is prefaced by a synopsis of its contents and by brief introductory remarks on the clinical pathology of its subject. A lucid brevity has been maintained throughout the volume.

Dr. S. Weir Mitchell has written a new novel with the title "*A Diplomatic Adventure*," the first chapter appearing in the February *Century*. In the opening sentences Dr. Mitch-

ell gives an idea of the scene and setting:

No man has ever been able to write the history of the greater years of a nation so as to include the minor incidents of interest. They pass unnoted, although in some cases they may have had values influential in determining the course of events. It chanced that I myself was an actor in one of these lesser incidents, when second secretary to our legation in France, during the summer of 1862. I may possibly overestimate the ultimate importance of my adventure, for Mr. Adams, our Minister at the court of St. James, seems to have failed to record it, or, at least, there is no allusion to it in his biography. In the perplexing tangle of the diplomacy of the darker days of our Civil War, many strange stories must have passed unrecorded, but surely none of those remembered and written were more singular than the occurrences which disturbed the quiet of my uneventful life in the autumn of 1862.

The opening chapter promises a story of unusual interest, written in Dr. Mitchell's own entertaining style.



# County Societies in Affiliation with the State Medical Association

County.	President	Address of President.	Secretary	Address of Secretary
Adair	James Hanks	Brashear	E. C. Grim	Kirksville
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah
Atchison	W. G. Stafford	Tarkio	A. McMichael	Rockport
Audrain	C. A. Rothwell	Mexico	E. S. Cave	Mexico
Barton	G. D. Allee	Lamar	J. L. McComb	Lamar
Bates	J. R. Coulson	Spruce	E. N. Chastain	Rich Hill
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw
Boone	E. Thornton	Columbia	W. A. Norris	Columbia
Buchanan	P. I. Leonard	St. Joseph	Chas. W. Fassett	St. Joseph
Butler	J. J. Norwine	Poplar Bluff	Ira W. Seybold	Poplar Bluff
Caldwell	R. K. Dodge	Palo	Tinsley Brown	Hamilton
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek
Cape Girardeau	H. L. Cunningham	Cape Girardeau	J. D. Porterfield, Jr.	Cape Girardeau
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren
Cass	G. W. Farrow	East Lynne	W. F. Chaffin	Kaymore
Chariton	J. R. Gaines	Mussel Fork	C. A. Jennings	Salisbury
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka
Clay	L. J. Jones	Linden	P. H. Matthews	Liberty
Clinton	John Sturgis	Perrin	E. A. Colley	Plattsburg
Cole	G. E. Etmueller	Jefferson City	A. W. McAlester	Jefferson City
Cooper	P. L. Hurt	Boonville	J. R. Lionberger	Boonville
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett
Franklin	H. A. Boohe	Pacific	A. C. Brown	Moselle
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois
Greene	G. W. Barnes	Springfield	Robt. M. Cowan	Springfield
Grundy	N. E. Sutton	Trenton	W. H. Winningham	Trenton
Harrison	A. H. Vandivert	Bethany	W. H. Wiley	Ridgeway
Henry	W. H. Benway	Deepwater	R. D. Haire	Clinton
Holt	C. L. Evans	Oregon	J. F. Chandler	Forest City
Howard	V. Q. Bonham	New Franklin	C. W. Watts	Fayette
Howell	A. H. Thompson	Lanton	A. H. Thornburgh	West Plains
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City
Jasper	R. D. Pifer	Joplin	R. M. James	Joplin
Jefferson	T. L. Bradley	DeSoto	H. Will Elder	DeSoto
Johnson	W. H. Farrar	Warrensburg	E. H. Gilbert	Warrensburg
Knox	L. S. Brown	Edina	Henry J. Jurgen	Edina
Laclede	J. C. Jacobs	Conway	P. L. Pritchett	Lebanon
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington
Lawrence	J. A. Harris	Mt. Vernon	C. A. Moore	Aurora
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy
Linn	J. W. Mason	Brookfield	Foster Burke	Laclede
Livingston	L. E. Tracy	Chillicothe	J. F. Cherrington	Chillicothe
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson
Macon	W. H. Miller	Macon	C. W. Reagan	Macon
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown
Marion	Richard Schmidt	Hannibal	H. L. Banks	Hannibal
Mercer	H. P. Chesmore	Princeton	C. R. Buren	Princeton
Miller	S. P. Hickman	Ulman	G. D. Walker	Eldon
Mississippi	P. P. Boggan	East Prairie	W. P. Howle	Charleston
Moniteau	T. M. Robertson	Latham	W. R. Patterson	Tipton
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris
Montgomery	I. L. Jones	Jonesburg	W. M. Wheeler	High Hill
Morgan	W. L. Hatler	Barnett	I. T. Beale	Versailles
Newton	R. L. Wills	Neosho	Horace Bowers	Neosho
New Madrid	Welton O'Bannon	New Madrid	C. W. Watson	New Madrid
Nodaway	F. R. Anthony	Maryville	L. E. Dean	Maryville
Pemiscot	J. G. Luten	Caruthersville	John Johnson	Hayti
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia
Phelps	W. H. Bruer	St. James	S. L. Bavsinger	Rolla
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana
Platte	C. H. Chastain	Weston	G. C. Coffey	Platte City
Pulaski	W. L. Ragan	Richland	G. W. Orrick	Crocker
Putnam	C. H. Carryer	Hartford	A. Townsend	Unionville
Ralls	W. S. Harwood	Rensselaer	T. J. Downing	New London
Randolph	G. O. Cuppaige	Moberly	W. M. Dickerson	Renick
Ray	J. D. Greene	Richmond	E. F. Higdon	Richmond
Reynolds	I. M. Lowrey	Centerville	T. W. Chilton	Corridon
Ripley	S. A. Proctor	Doniphan	J. F. Redwine	Doniphan
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall
St. Charles	J. R. Mudd	St. Charles	B. K. Stumberg	St. Charles
St. Clair	W. Cline	Appleton City	E. D. Miles	Oscola
St. Genevieve	C. Moore	St. Marys	R. W. Lanning	St. Genevieve
St. Louis	Geo. Homan	Odd Fellows Building	Godloe	Vanol Building
St. Louis Co.	Howard Carter	Webster Groves	R. D. Moore	Central
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing
Scotland	A. L. Davis	Arbela	O. F. Pile	Memphis
Shelby	D. W. Dallis	Hunnell	A. M. Wood	Centner
Stoddard	L. R. Corbin	Bloomfield	John Ashley	Bloomfield
Sullivan	E. C. Kessenger	Milan	I. S. Montgomery	Milan
Vernon	A. C. Dulin	Nevada	T. B. Todd	Richards
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City
Washington	I. A. Eaon	Belgrade	W. S. Smith	Belgrade
Wayne	I. P. Sebastain	Patterson	R. J. Owens	Mill Spring
Worth	O. H. P. Mills	Grant City	J. K. Phipps	Grant City

# MEETINGS OF THE COUNTY MEDICAL SOCIETIES

County.		Date of Meeting.
Adair.....	Quarterly.	Last Tuesday, Jan., April, July, Oct.
Andrew.....	Monthly.	First Wednesday.
Atchison.....	Quarterly.	January, April, July, October.
Audrain.....	Monthly.	First Monday.
Barton.....	Quarterly.	First Thursday, May, Aug., Nov., Feb.
Bates.....	Quarterly.	Last Thursday in Feb., May, Aug. and Nov.
Boone.....	Monthly.	First Monday.
Buchanan.....	Semi-Monthly.	First and Third Saturday.
Butler.....	Monthly.	Last Friday.
Caldwell.....	Quarterly.	July, October, January, April.
Callaway.....	Monthly.	Second Thursday.
Camden.....	Quarterly.	Second Monday, April, July, Oct., and Jan.
Cape Girardeau.....	Monthly.	Second Wednesday.
Carroll.....	Monthly.	Second Tuesday.
Carter-Shannon.....	Quarterly.	February, May, August and November.
Cass.....	Quarterly.	First Thursday of March, June, Sept. and Dec.
Chariton.....	Monthly.	Last Thursday.
Clark.....	Bi-Monthly.	First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay.....	Monthly.	Last Monday.
Clinton.....	Monthly.	First Tuesday.
Cole.....	Quarterly.	Second Thursday of Jan., April, July, Oct.
Cooper.....	Monthly.	First Tuesday.
Crawford.....	Quarterly.	First Tuesday, April, July, October, January.
Daviess.....	Quarterly.	January, April, July, October.
Dunklin.....	Monthly.	Second Tuesday.
Franklin.....	Monthly.	First Tuesday.
Gasconade-Maries-Osage.....	Semi-Annual.	Fourth Thursday, April and October.
Greene.....	Semi-Monthly.	Second and Fourth Friday.
Grundy.....	Quarterly.	July, October, January, April.
Harrison.....	Quarterly.	Third Tuesday, January, April, July, October.
Henry.....	Quarterly.	Second Wednesday, Dec., March, June, Sept.
Holt.....	Quarterly.	First Thursday, January, April, July, October.
Howard.....	Monthly.	First Friday.
Howell.....	Bi-Monthly.	First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron.....	Monthly.	First Saturday.
Jackson.....	Semi-Monthly.	Second and Fourth Thursdays.
Jasper.....	Semi-Monthly.	First and Third Mondays.
Jefferson.....	Monthly.	Fourth Tuesday.
Johnson.....	Quarterly.	June, September, December, March.
Knox.....	Monthly.	First Monday.
Laclede.....	Quarterly.	Second Monday, Jan., April, July, Oct.
Lafayette.....	Monthly.	Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lawrence.....	Monthly.	
Lincoln.....	Quarterly.	May, August, November, February.
Linn.....	Quarterly.	October, January, April, July.
Livingston.....	Monthly.	Third Wednesday.
McDonald.....	Quarterly.	Second Wednesday, Jan., April, July, Oct.
Macon.....	Monthly.	Second Tuesday, 10 a. m.
Madison.....	Semi-Monthly.	First and Third Monday.
Marion.....	Monthly.	First Friday.
Mercer.....	Monthly.	Second Thursday.
Miller.....	Quarterly.	First Thursday, March, June, Sept., Dec.
Mississippi.....	Monthly.	First Monday.
Monteau.....	Quarterly.	March, June, September, December.
Monroe.....	Quarterly.	First Tuesday of April, July, October, January.
Montgomery.....	Monthly.	
Morgan.....	Quarterly.	First Wednesday of March, June, Sept., Dec.
New Madrid.....	Monthly.	Second Tuesday.
Newton.....	Monthly.	Second Tuesday.
Nodaway.....	Quarterly.	First Tuesday, January, April, July, November.
Pemiscot.....	Monthly.	First Wednesday.
Perry.....	Semi-Monthly.	First and Third Monday.
Pettis.....	Quarterly.	March, June, September, December.
Phelps.....	Monthly.	
Pike.....	Monthly.	First Wednesday.
Platte.....	Quarterly.	November, February, May, August.
Pulaski.....	Monthly.	First Wednesday.
Putnam.....	Quarterly.	January, April, July and October.
Rails.....	Monthly.	Second Tuesday.
Randolph.....	Monthly.	Third Wednesday.
Ray.....	Quarterly.	January, March, June, October.
Reynolds.....	Monthly.	
Ripley.....	Monthly.	Second Tuesday.
Saline.....	Monthly.	
St. Charles.....	Quarterly.	Second Tuesday, March, June, Sept., Dec.
St. Clair.....	Monthly.	Second Wednesday.
Ste. Genevieve.....	Weekly.	Saturdays.
St. Louis.....	Monthly.	Second Wednesday.
St. Louis County.....	Semi-Annually.	July and December.
Schuyler.....	Monthly.	Second Tuesday.
Scotland.....	Quarterly.	June, September, December, March.
Shelby.....	Bi-Monthly.	First Wednesday, Jan., Mch., July, Sept., Nov.
Stoddard.....	Monthly.	
Sullivan.....	Quarterly.	First Tuesday, March, June, Sept. and Dec.
Vernon.....	Monthly.	
Warren.....	Monthly.	First Saturday.
Washington.....	Monthly.	
Wayne.....	Monthly.	Second Wednesday.
Worth.....	Monthly.	

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

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## ORIGINAL ARTICLES

### MISTAKES IN THE DIAGNOSIS OF APPENDICITIS.\*

By H. C. DALTON, M. D., St. Louis.

A great many factors serve to account for mistakes in the diagnosis of appendicitis. This little organ lies normally in the right iliac fossa at the junction of the ileum and ascending colon. It varies in length from a rudimentary papilla to nearly one foot in length, and being attached to the one point only to a partially movable caecum its extremity is freely movable. This mobility is the cause of a vast number of mistakes in diagnosis. While the appendix has no tendency to adhere to other structures in a normal state, it is very liable to do so when inflamed. It may become attached to contiguous intestine, to the ovary, uterus, rectum, etc.

Inflammation of the gall bladder is sometimes complicated by an adherent appendix. Quite frequently an appendix is found in hernia of right side and sometimes also on the left side.

In very rare cases the abdominal organs may be transposed and the appendix be on the left side, thus adding greatly to the difficulty of diagnosis. In rare cases a Meckel's diverticulum may exist in the lower

part of the ileum, and an inflammation of this pouch may cause symptoms impossible of diagnosis. A case in point was that of a surgeon in St. Paul who operated for appendicitis and removed a diseased Meckel's diverticulum. A year or two later the patient had a genuine attack of appendicitis and another surgeon removed the appendix with the result that the first surgeon was sued for malpractice.

There can be no doubt that many abdominal as well as thoracic conditions have been diagnosticated as cases of appendicitis. The symptoms so perfectly simulate those due to an inflamed appendix, and the history is so obscure, that an accurate diagnosis is extremely difficult. It is, however, satisfactory to know that the symptoms are usually such as to enable the surgeon to realize the necessity of prompt surgical interference.

When we consider the frequency of appendicitis and remember the fact that both the profession and the laity have been led to believe that pain in the right iliac fossa, tenderness at McBurney's point,

\* Read at Annual Meeting Missouri State Medical Association, Excelsior Springs, May, 1905.



fever, and rigidity of the right rectus muscle are pathognomonic of appendicitis, we are surprised that errors are not of more frequent occurrence. In some instances the symptoms so perfectly simulate those due to an inflamed appendix, as to render an accurate diagnosis well nigh impossible. Pleurisy and even neuralgia have often been mistaken for the disease. Dr. Janeway has reported several cases of neuralgia that were subjected to celiotomy because of the surgeon's failure to correctly estimate the value of the symptoms. The same error has been made in patients suffering from lead poisoning, infected gall bladder, hysteria, floating kidney, lumbar abscess, and what not. Muscular rigidity is one of the most constant symptoms of localized peritonitis, and when it is associated with severe pain in the right inguinal region, tenderness at McBurney's point, and fever, in other words when the clinical picture due to a localized peritonitis is present, the surgeon must painstakingly seek and find the cause instead of deceiving himself into the idea that the appendix *must* be the cause of the symptoms.

In the brief time allotted me I can but call attention to the more frequent affections that have been wrongly diagnosticated as appendicitis, trusting that these cases may awaken each and every member of this association to the importance of becoming fully conversant with every lesion that might be mistaken for an infected appendix.

*Typhoid Fever.*—The unnecessary opening of a typhoid fever patient's abdomen is a very serious and grave

error. Many, or at least several, of the world's most renowned surgeons have erred in this particular. As a rule the muscular rigidity and tenderness is not so pronounced as in other affections simulating this disease. In atypical cases, or in instances where the surgeon sees the case for but a few hours, the diagnosis may be quite confusing. In Dr. Richardson's case the patient was many miles from a competent surgeon and could not be properly watched. Perhaps another reason for operating was the fact that Dr. Richardson was fully alive to the possibility of the patient's becoming suddenly worse. At the examination under ether he felt confident that he detected muscular rigidity and the presence of a tumor. The enlarged glands found at the operation showed changes due to the typhoid bacillus.

*Pedicle Torsion.*—When an ovarian tumor becomes turned upon its axis and the pedicle twisted the patient complains of abdominal pain of increasing severity, inguinal tenderness, nausea and vomiting. Examination will show the presence of fever, muscular rigidity, shock, and a tense, painful, rapidly developing tumor. The history may reveal the fact that a tumor was noticed weeks, months or even years before the present attack. In Dr. Roth's case the patient complained of severe, persistent pain in the right iliac region, exquisite tenderness at McBurney's point, and a bloody vaginal discharge. When the abdomen was opened a strangulated ovarian cyst was found. A similar case has been recorded by Brewer and others.

*Perforated Ulcer.*—When a gastric or duodenal ulcer perforates it causes clinical manifestations closely simulating those of a perforated appendix. Mr. Moynihan has called attention to the fact that the escaped bowel or stomach contents find their way, owing to a hillock in the transverse mesocolon under the pyloric end of the stomach, to the outer side of the ascending colon, and thence pass downward into the right iliac fossa, where the resulting peritonitis frequently leads to the diagnosis of appendicitis. By careful questioning a previous gastric trouble will be elicited. The meteorism that follows a gastric or duodenal perforation is of quite rapid development. Mr. Moynihan and others have frequently operated upon patients in which the wrong diagnosis of appendicitis had been made. Dr. Spellissy has found 43 cases of perforated gastric and duodenal ulcers that have been wrongly diagnosed as cases of appendicitis.

*Gall Bladder Lesions.*—Acute cholecystitis has been frequently mistaken for appendicitis. If the tumor can be closely outlined, and noted to move up and down during respiration, and if there be a history of previous attacks in which the pain resembled that of hepatic colic, the diagnosis should not be difficult. Dr. Spellissy has collected 30 cases in which a wrong diagnosis was made. In Dr. Brewer's case, the patient, a lady of 33, had suffered previous attacks in which the pain was localized in the right iliac fossa: there was great tenderness at McBurney's point, muscular rigidity, temperature 99.8

degrees, pulse 100, persistent vomiting, and chilly sensations.

*Pyosalpinx.*—Even simple salpingitis has been diagnosed as appendicitis, hence we need not be surprised that pyosalpinx has been mistaken for that disease. Dr. Roth's case, a woman of 24, was the mother of two children, and had aborted six days previously. She complained of sudden abdominal pain and vomiting. The pain localized in the right iliac fossa. Just above Poupart's ligament there was extreme tenderness, together with muscular rigidity of the right rectus. Constipation and a vaginal discharge were present, the latter being without odor. By palpation a tumor was detected to the right of the uterus, which was tender on palpation. The pulse was 100, temperature 104. Celiotomy revealed pyosalpinx. In Barker's case the pus tube, which had ruptured, was diagnosed as appendicitis. In one of Brewer's cases celiotomy showed a translucent cyst of the Fallopian tube.

*Renal Calculus.*—When a stone becomes impacted in the kidney pelvis or in the ureter, it causes symptoms that have frequently been considered due to an infected appendix. The simple passage of a stone from kidney to bladder may cause similar symptoms. It may cause pain referred to right iliac region, tenderness at McBurney's point, vomiting, and muscular rigidity. The presence of pus in the urine; history of hematuria; tenderness on palpation along the course of the ureter; pain in the testicles and down the thigh; and the history of the previous condition usually makes a diagnosis

fairly easy. In Dr. Roth's case, the patient, a girl of 13, gave a history of previous attacks, the pain in which was not excruciating, was referred to the umbilicus, and later became somewhat located in the right side; there was a palpable mass in the right inguinal region, fever, rapid pulse, and tenderness just above McBurney's point. Celiotomy revealed a hydronephrosis, the exact cause of which could not be determined. In one of Dr. Brewer's cases there was a history of frequent attacks of severe pain in right side. The appendix was removed but the symptoms continued. The kidney was then anchored without benefit. During the last attack there was moderate fever, pain, pus and casts in the urine, little or no muscular rigidity, nausea and vomiting. The kidney was exposed, palpated, but no stone felt. It was then incised and a stone found.

*Intussusception.*—In children intussusception is not of frequent occurrence, but the clinical manifestations induced are usually quite clear and the diagnosis fairly easy—the bloody, mucous stools, the tenesmus, the palpable, rapidly developed movable mass, and the history of the case, being quite characteristic. In one of Dr. Roth's cases, the patient, a man of 40 years, complained of pain in the right inguinal region, which increased in severity, vomiting and constipation. However, his bowels moved forty hours after the onset of the attack. Palpation revealed a large mass in the appendiceal region, muscular rigidity and tenderness. Celiotomy revealed an ileocolic intussusception. To my mind the character of the pain, the

sudden appearance of the mass, the absence of fever, would point to the character of the lesion.

*Extra Uterine Pregnancy.*—When the clinical manifestations of tubal rupture are of moderate severity and a careful history and rectal examination are neglected, the surgeon will be misled unless hemorrhage be detected. I can not too forcibly impress the fact that when a married woman of the child bearing period complains of sudden abdominal pain, and there is the least confirmatory signs of pregnancy, and if the painstaking examination leads the surgeon to determine that hemorrhage is present, the probability of extra-uterine pregnancy should be carefully considered.

*Intestinal Obstruction.*—Dr. Spelissy has collected 18 cases in which the obstruction was due to Meckel's diverticulum. A number of other conditions causing obstruction have been mistaken for appendicitis. In the case of Dr. Mumford, the obstruction which was mistaken for this condition was due to a compact mass of orange pulp in the caecum.

*Floating Kidney.*—The fact that the right kidney may find its way into the right iliac fossa must be borne in mind. A palpable mass in this region, associated with colicky pains in the loins, umbilicus and appendiceal region; rigidity of the right rectus; tenderness at McBurney's point, vomiting and fever, forms a picture simulating that due to an inflamed appendix. A careful urinalysis, and a history of previous attacks, together with a careful study of all the symptoms will generally suffice to put us on the right track.



The following conditions have been mistaken for appendicitis: Undescended testicle (Cumston); hematoma of the broad ligament (Barker); hernia that had been reduced en masse (Barker); and torsion of the entire great omentum (Scudder). Gustaf Noerstrom states that he has seen myositis mistaken for appendicitis in a number of instances. He relates one in which he states that an error might easily have been made had the consulting physician been less on his guard.

Before closing this subject I desire to report a case of more than usual interest which occurred in my own work. The patient, Miss L., aet. 27, was kindly referred to me by Dr. R. C. Atkinson. He, on February 24th, 1905, considered the case one of appendicitis, and after a careful examination I concurred in the diagnosis. I saw the patient on the fourth day—she had steadily increasing temperature, and pain in the right iliac fossa from the beginning of the attack. When I saw her the pulse was 106, temperature 102 F. The pain was continuous, particularly marked at McBurney's point. At this site percussion gave a large area of dullness and a well marked circumscribed induration. The operation revealed a retro-peritoneal cyst, filled with dark bloody fluid, which at first I took to be papillomatous in character. The inner layer of the cyst was quite red, due I supposed to inflammation, which accounted for the intense pain. On account of the patient's already enfeebled condition, and the extensive attachment of the cyst (attached to rectum, right side of uterus, and to posterior peritoneum

as high up as the region of the kidney), I concluded it best to empty and pack it, sewing it to surgical wound. The patient, after doing well for two days, became wildly delirious for several days, after which consciousness returned. She had fever more or less for a month, (at times quite high), for which we could not account, as frequent examinations failed to reveal any evidence of a septic focus. She is now well.

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#### DISCUSSION.

Dr. J. A. Larrabee, Barnard: I had a case in which I think I was mistaken. We had the usual symptoms of appendicitis, with intense pain in the region of McBurney's point and had to give two hypodermics of morphine to give relief. I put him on the starvation treatment and in two or three days he developed a case of cholecystitis. I have had patients with pain in the stomach, or liver develop appendicitis but I never before met a case with such pronounced symptoms of

appendicitis that proved to be a cholecystitis. The rigidity of the right rectus has never been a reliable symptom to my mind.

Dr. Herman F. Pearse. Kansas City: If those of us who operate upon the abdomen would attempt to report all of the cases in which there were some symptoms of appendicitis and yet there was no such condition present, we would take longer than this association is to be in session. One symptom that has been of much benefit to me in the diagnosis of appendicitis is the muscular rigidity. Hilton says in his book entitled "Rest and Pain" that whenever a nerve sends sensory filaments to a joint it sends motor filaments to all muscles that are concerned in moving that joint. The abdomen is like a huge joint with its serous surfaces gliding one upon the other, and when one portion of the abdominal peritoneum becomes inflamed the muscles over it and about it become rigid. The last speaker will not find rigidity of the right rectus muscle unless the peritoneum in the neighborhood is acutely inflamed. If, as in a case that came under my observation, the appendix has been carried over to the left side, the head of the colon forming the right wall of the inflamed area, the sigmoid flexure the left wall. The bladder and rectal muscles will be

rigid and the rigidity will be in the transverse fibers of the abdominal muscles on the left side. If we will apply Hilton's law and apply it carefully it will help us very much in the diagnosis of appendicitis. There are many difficulties of diagnosis. Palpation through the rectum in the male, through the vagina in the female will aid in the diagnosis.

Dr. J. M. Allen. Liberty: Thirty-six years ago a writer announced his belief that there should be more operations in typhoid fever. The diagnosis of typhoid is easy and the principle ought to be that in every case of perforation in typhoid fever laparotomy should be performed at once. Many lives would thus be saved.

Dr. St. Elmo Sanders. Kansas City: The essayist has omitted to mention those cases where we occasionally have a diarrhoea with the symptoms of appendicitis. I saw one case where there was a violent diarrhoea and it confused me. I have seen several cases reported in each of which there was an abnormally long appendix. We may have an inflammation in the tip of the appendix and that does not involve the caecum. When the caecum is not involved we may have a diarrhoea, otherwise there is a constipation.

## UTERO-VAGINAL FIXATION FOR THE RELIEF OF EXTENSIVE UTERINE PROLAPSE AT OR NEAR THE MENOPAUSE.\*

By FRED J. TAUSSIG, M. D., St. Louis.

The above title may seem somewhat compendious but, even as it is, it does not fully describe the particular class of prolapse cases I wish here to consider.

Let me emphasize at the start that I do not include those cases in which there is only a moderate degree of prolapse of the vaginal walls with descensus of the uterus. For them, if a pessary fails, a simple plastic, associated at times with Alexander's operation, will as a rule be sufficient. I include only such patients in whom when standing erect, the uterus partly or wholly protrudes from the vaginal orifice and in whom there is associated more or less complete eversion of the vaginal mucosa. Furthermore, I think we must in our operative procedures sharply differentiate those cases in which the possibility of a future pregnancy must be considered from cases beyond the menopause. Under forty years of age we have not the right, unless under exceptional circumstances, to so modify anatomic relations in the pelvis by our operations for prolapse that a resulting pregnancy would be attended with great danger to the mother and child. Any firm fixation of the fundus interfering with the growth of the uterus would hence be unjustifiable.

We must usually be content with simple plastics even if later on there is a recurrence and the operation has to be repeated. If the woman be *over* forty years but before the menopause, the decision as to future pregnancies may be left to her. If she is still anxious to have a child, we can not do any radical operation. An operation such as the utero-vaginal plastic of Freund-Wertheim should only be done upon women beyond the menopause or on such women over forty as do not desire another child and on whom a sterilizing operation such as resection of the tubes associated with the plastic is permissible to avoid a possibility of conception.

After this rather extended definition I wish to emphasize that in this group of cases a very considerable percentage of all prolapses is comprehended, so great in fact that they present the majority of women who come to us for operative relief. Doederlein, for instance, found that 75 per cent of his cases of total prolapse occurred in women over 40 years old.

Utero-vaginal plastic, first proposed by Freund in 1896, and modified by Fritsch, Wertheim and Schauta, was devised especially for this class of cases and to avoid the

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\*Read before the St. Louis Obstetrical and Gynecological Society, December 14, 1905.



frequency of recurrence which had previously attended other operative measures. Thus far it has met with but little favor in this country, chiefly I believe, because its principles have never been correctly understood. I have therefore felt it my duty to give a somewhat detailed account of the method before I took up for consideration its advantages and disadvantages over other methods of procedure.

With the patient in the lithotomy position, the cervix is grasped with vulsella and pulled out as far as possible and downward over the perineum. The cystocele is thus exposed and a large oval area denuded on the anterior vaginal wall extending from one to two cms. below the meatus urinarius to the cervix. The extent of denudation required will depend on the relaxation in the individual case. The bladder is now separated from the cervix, care being taken to start sufficiently near the external os, since it occasionally happens that the intravaginal portion of the cervix is very short. The bladder must also be freed laterally to some extent, so that it can readily be pushed aside in the later stages of the operation. If the cervix be hypertrophic or greatly elongated, an amputation as high as necessary should now be done. The anterior peritoneal fold is then caught with forceps and opened, and the fundus uteri pulled out through the opening into the vagina. In women who are not yet in the menopause a resection of the interstitial and isthmic portion of the tube should be done to prevent conception. Next, the vesical peritoneum is sutured to the posterior surface of the uterus

at a point near the insertion of the sacrouterine ligaments, thus shutting off the peritoneal cavity. If possible the ovaries should be allowed to remain within the abdomen. The uterus is now pressed against the denuded area anteriorly, while the edge of the vaginal mucosa near the urethra is drawn over the insertion of the tubes and sutured to the anterior surface of the uterus on the same side. A similar suture is taken on the other side. Then the rest of the uterus is covered with vaginal mucosa except for an area on the anterior wall the shape of a narrow isosceles triangle with its base to the urethra. The operation is concluded by an extensive perineo-plastic.

I should like here to insert a brief report of two patients on whom I recently performed such a utero-vaginal plastic with good result.

Mrs. A. B., aged 54, married, came into my charge Feb. 14, 1905. She had had six children, having had a laceration with the first one thirty years ago. This laceration did not apparently give rise to any symptoms. Five years ago, at the age of forty-nine therefore, the menopause was established.

For the past two years she had observed a protrusion from the vaginal orifice that had been growing progressively larger. Until June, 1904, the protrusion did not cause her much inconvenience but in the succeeding months she walked a good deal at the World's Fair and the prolapse became considerably larger. There were severe urinary symptoms (increased frequency, difficulty and pain) and a decubitus formed. In September she went to

a physician who inserted a pessary. This gave her temporary relief and permitted the decubitus to heal. After a time the pessary could no longer be retained, hence she sought operative relief.

On examination I found the external tear extending to the sphincter with resulting cystocele and rectocele. In the erect posture there was a complete prolapse of uterus and vagina. No evidence of any ulceration. Uterus small, atrophic, freely movable. No discharge.

On February 16th, a typical Wertheim prolapse operation was performed. The uterine body being rather small, did not serve as an ideal support for the cystocele hence the plastic anteriorly was made very extensive. A perineorrhaphy was done posteriorly.

Patient made a good recovery and left the hospital March 8. Urinated spontaneously on the fifth day. Slight suppuration along one perineorrhaphy stitch.

On November 25th, 1905, (eight and one-half months after operation) patient was in excellent condition, able to do all work, even the severest, without any of her former complaints. On examination very slight protrusion of vaginal walls on bearing down as hard as possible.

The second case of prolapse was operated on by me at the Washington University Hospital this fall in the absence of H. S. Crossen, chief of the gynecological clinic, and I wish to thank him for permission to include its report in this paper.

Mrs. K. V., aged 51, came to the gynecological clinic September 6, 1905. She had had fourteen children in the thirty-five years of her

married life and no miscarriages. The menopause began eight years ago. Previous to that time her menstruation had been regular. The patient dates back her present trouble to about a year ago when she began to notice that her womb would come out whenever she did any washing or stood on her feet a great deal. Previous to this she had had backache and some dragging in the pelvis but thought that every woman was bound to have that. There had lately been considerable pain in the lower abdomen. For the past two months the discharge had been profuse and there had been some soreness. There were occasional cramps in the legs. Urinary symptoms had lately been very annoying. They consisted of increased frequency, burning, and difficulty in urination as long as the prolapse was down. The bowels were usually costive.

On examination I found a total prolapse of the uterus with complete inversion of the vagina. A decubitus ulcer was situated on the posterior cervical lip. The fundus appeared to be enlarged, was freely movable and not sensitive. The ulcer was treated a few times with 10 per cent. copper sulphate until healed. On September 14th the patient entered the hospital and on September 18th a Freund-Wertheim plastic was done.

The only unusual feature in the operation was the difficulty experienced in reaching the anterior vesical peritoneum. This was due to the elongation of the cervix which in this case was four inches long. The body of the uterus was only half an inch long. About one inch



of the cervix was amputated.

A very extensive perineo-plastic concluded the operation. The patient made a good recovery, the only abnormality being an inability to void urine. She had to be catheterized for eight days and during that time boric acid irrigations of one pint each were given after each catheterization. The patient also received helmitol 15 grains three times a day from the fourth day on. The urine remained clear but contained a trace of albumen and a few hyaline casts, a condition already noted before operation. Patient left the hospital on the twentieth day after operation. At this time the anterior surface of the uterus was entirely covered with epithelium with the exception of a strip about one cm. wide and 4 cm. long. A very slight agglutination between this raw surface and the posterior perineorrhaphy wound had to be freed. The peritoneum had healed by first intention. On Dec. 1, 1905, about two and a half months after the operation the patient was again examined. Subjectively, she was feeling perfectly well and able to do all her house work. The uterus was found healed in the anterior vaginal wound. A few red granulations were still to be seen near the cervix. This was due in great part to the patient's failure to come for after-treatment. The perineum was strong and unyielding. Even the most severe downward pressure did not cause any protrusion of the vaginal wall. There were no further bladder symptoms.

There have been several important modifications to the utero-vaginal plastic of Wertheim. The original

suggestion of W. A. Freund was merely to invert the uterus through a posterior celiotomy incision into the vagina and, fixing it there, use it, so to speak, as the obturator of the prolapse. There are several serious objections to this operation. In the first place the fixation without denudation is not very firm. Secondly the exposed peritoneal surface gives rise to an irritating discharge. There is frequently formed a granuloma over the raw exposed surface. Furthermore there is no possibility of intercourse and lastly the uterus is sometimes too large and sometimes too small to act as a proper obturator for the vagina.

Fritsch's modification in 1900 corrected only the first of these points by denuding the anterior and posterior vaginal walls before fixation. In both his and Freund's operation an opening had to be made in the fundus to permit the outflow of the uterine secretions.

It was Wertheim who first put the operation on a more practical basis. In his opinion the uterus should not be used as an obturator but as a stopper for the cystocele. Hence he inverted the uterus through an anterior celiotomy incision. He also considered it of importance that the vagina be not obliterated so as to prevent intercourse. At first he merely fastened the posterior surface of the uterus to the denuded anterior wall. Later he found it more advantageous to cover the sides and a portion of the vaginal wall as well so as to diminish the quantity of exposed uterine surface. Bucura has demonstrated how rapidly the exposed area is covered with vaginal epithelium.



Schauta's modification is only one step further in the same direction. He covers the uterus entirely with vaginal mucosa. The observations of Fuchs recently published make me doubt whether this is to be really considered as an advance. The latter occasionally finds after this operation that the uterus has again assumed an erect position, thus giving the bladder a chance to descend. By leaving a small exposed area to granulate over, the fixation of the uterus beneath the bladder becomes more firm and the aforementioned condition can hardly occur.

Finally there has just been published in the *Centralblatt fuer Gynaekologie* (Oct. 28, 1905.) an interesting modification of this operation by Th. Landau. Landau amputates a portion of the fundus and uses the remaining piece together with the cervix in the same way that Wertheim and Schauta do. The advantage, he claims, lies primarily in putting the sacro-uterine ligaments on a stretch. I can see the advantage of Landau's method in cases where the fundus is unusually large. As a rule, however, the increase in size in the uterus in cases of prolapse is centered in the cervix. Landau's object could be attained better in these cases by amputating the cervix just as had been done right along by Wertheim and other operators, wherever deemed necessary.

From the reports of Klein, Bucura, Schauta, Kroenig, Fuchs and Doederlein I have been able to put together 134 cases from which the frequency of a recurrence could be determined. In only five of these 134 cases was there a return of the

prolapse. All of them had been under observation for over eight months, and the majority for several years. In the five cases in which there was a recurrence of the prolapse, the reason lay in an insufficient perineo-plastic. The fundus remains in position and the cervix owing to the absence of proper support describes the arc of a circle about the symphysis as a fixed point and appears at the vaginal orifice. These recurrences, it seems to me, show that the action of the uterus in these cases is neither as obturator nor stopper but rather as a sort of pessary of cylindrical shape whose anterior end is fixed to the pubic arch and whose posterior end (the cervix) is supported by the perineal body. In thirteen other cases there was noted objectively a very slight protrusion of the vaginal walls, but this gave rise to absolutely no symptoms. This would make the percentage of cures 96.5 per cent. subjectively, 87 per cent. objectively. These figures compare most favorably with the results obtained in the two main methods that concur with it in the treatment of these prolapses: (1.) ventro-fixation and colpoplasty and (2) vaginal extirpation of the uterus.

The results with ventro-fixation and plastic according to Christiani in this form of prolapse were in 83 cases, 73 per cent. absolute cure and 87 per cent. ability to work. The results of Bumm in 105 patients whose prolapses had been corrected by vaginal hysterectomy, showed 75 per cent. absolute cures. While I am aware of the extreme difficulty in justly comparing the results of any operative methods without more de-

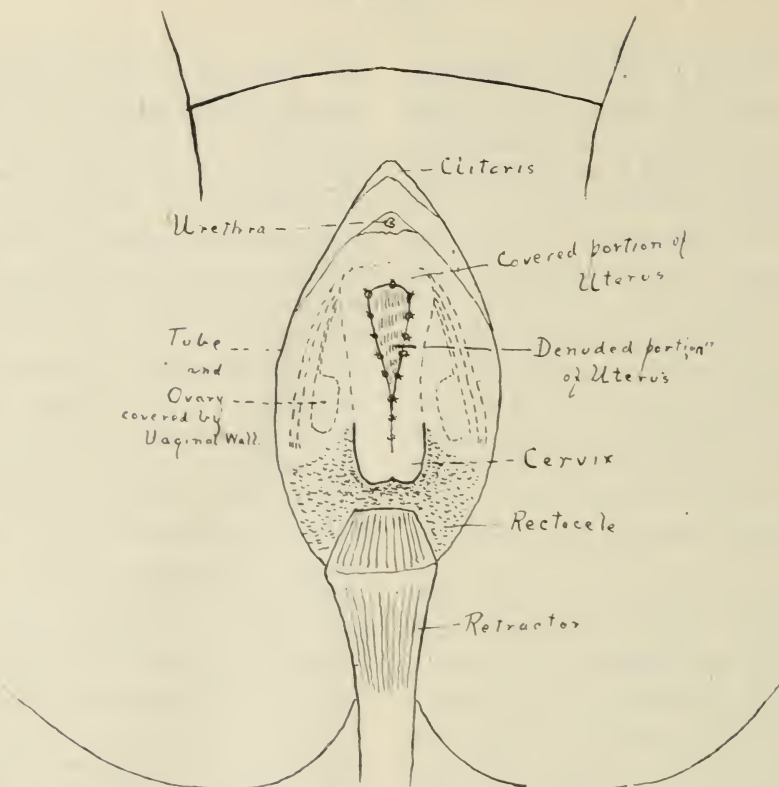


Figure 1. Wertheim's operation for total prolapse of the uterus. This shows the anatomical relations after the uterus had been pulled through the opening in the peritoneum of the vesico-uterine pouch and fastened between bladder and anterior vaginal wall. The vaginal denudation is made so extensive that a portion of the anterior wall of the uterus remains denuded. The cervix projects free into the vagina. Tube and ovary are partly intra-peritoneal, partly lying in the vesico-vaginal septum.

tailed information as to the nature of the cases and the manner of the post-operative examination. I think these figures make it appear that the permanent results of utero-vaginal plastic justify the belief in its efficacy inspired by a consideration governing the formation of prolapse.

Let us first consider the defects of the other two methods already referred to.

Ventro-fixation, as Pfannenstiel and Schauta emphasized brings the uterus nearer the abdominal wall. To a certain extent this prevents the bladder, when full, from rising up out of the pelvis. It thus literally

compels the bladder to put its dilating force upon the already weakened anterior vaginal wall and the consequence must in a certain percentage of cases be a return of the cystocele that is most to be feared, as this is the weakest point in the pelvic floor and the cystocele is most liable to give rise to disturbing symptoms.

Another objection to the ventro-fixation operation is the fact that not infrequently it is the greatly elongated cervix that protrudes from the vaginal outlet while the fundus may remain at approximately the normal position. In my second case, for instance, I believe

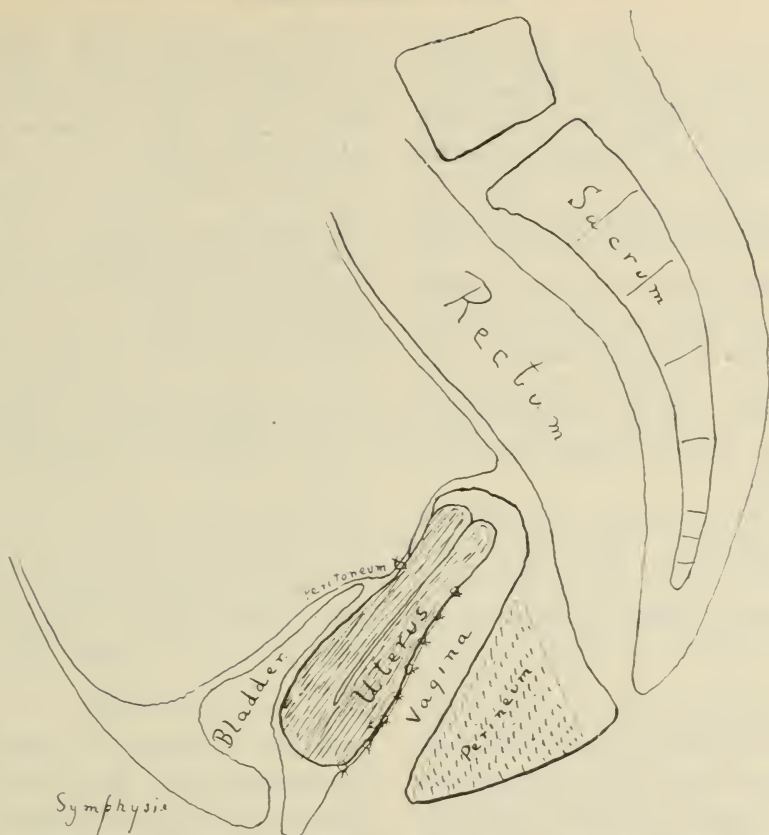


Figure 2. This shows a sagittal section through the pelvis at the conclusion of the operation. The uterus lies in strongly anteverted position in the vesico-vaginal septum. The point will be noted where the vesical peritoneum is sutured in the peritoneum of the posterior uterine wall. A very extensive perineo-plastic is the last step in the operation.

a ventro-fixation could not have had any appreciable effect on the prolapse. Of course, we might as has been suggested by some, amputate the uterus and fasten the cervix to the abdominal wall but this would be bound to increase the primary mortality by prolonging the abdominal operation and would not correct the cystocele as already pointed out.

Finally do not let us forget that ventro-fixation with vaginal plastic exposes the intestines, necessitates a new and unnecessary wound in the abdominal wall, requires a change in the position of the patient with attendant loss of time and in a cer-

tain percentage of cases results in post-operative hernia. I hear a great deal of pooh-poohing about post-operative hernia and doubtless it is much rarer than heretofore but it does occur, and I refuse to put an iota of reliance in the broad statements regarding this matter made by surgeons who do not carefully follow up their cases for a number of years.

Vaginal hysterectomy with attendant plastic probably has been, and still is, the favorite operation for complete prolapse. Its advantages are evident. Its disadvantages have been gradually shown by the experiences of various operators. I



can not here go into a consideration of the many methods devised for a restoration of the pelvic floor after the removal of the uterus. The fact remains that when we take away the uterus, we take away the keystone of the arch even if at the time of operation the arch might, figuratively speaking, be said to be broken. Without it a restoration is most difficult to accomplish and thus we have not so rarely a return of the prolapse in which often lie coils of intestines.

But there are other objections to this operation. In women over forty but not yet in the menopause it means a sudden cessation of the menses with its attendant symptoms on the part of the nervous system. Any hysterectomy, furthermore, even if vaginal, is attendant with more risk to the life of the patient than a simpler plastic. Doederlein reported three deaths in 63 operations,\* whereas in all the reports on utero-vaginal plastic amounting to over 200 operations I found record of only a single post-operative death.

There is finally to be considered the fact that after removal of the uterus the vaginal tube atrophies even more rapidly than otherwise and coitus soon becomes impossible.

From the aforegone it will be seen that utero-vaginal plastic, according to Freund-Wertheim, for extensive prolapse at or near the menopause is an operation that involves no change of position in the patient during operation, makes but a single wound, does not expose the contents of the abdomen, does not necessitate the removal of any organ, does not interfere with sexual intercourse and finally, by the position of the uterus, effectively prevents that most feared after-result, return of the cystocele. The evidence already at hand, 134 cases with but five failures, conclusively demonstrates its efficacy. I hope there will in the coming years be a diminution of the opposition that has thus far interfered with its more general acceptance by American surgeons and gynecologists in the particular class of cases under consideration.

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#### DISCUSSION.

Dr. Walter B. Dorsett said that five failures out of 134 cases certainly spoke in favor of the operation but looking at the plates he felt that two points might be criticised. In a prolapse there was first the elongation of the peritoneum over the prevesicular space, in other words, the peritoneum was stripped off the anterior abdominal wall over on to the bladder. There was also absence of perineal support, an elongation of the round ligaments, of the utero-sacral ligaments and the attenuated condition of the broad ligaments,—all causes of prolapse. This operation did not contemplate repair of the part of the peritoneum going over the top of the bladder. He suspected that the return was due to the bladder coming down first, not being supported from above, and carrying the uterus down with it. He objected, too, to the position in which the uterus

was left after this operation. The neck of the uterus was upward and the fundus down, thus interfering with the natural drainage of the uterus. In regard to ventrofixation, to do such an operation without a perineoplasty was perfectly useless. The chances of infection in an abdominal section were less than the risk run in doing the operation through the vagina. With the patient in the Trendelenburg posture the intestines could be pushed back and protected by gauze. There could not be any danger of injuring the intestines. It should not take more than twenty-five minutes to do a ventro-fixation from the time the abdomen was opened until it was closed again. The operation as practiced by Marcey was the one Dr. Dorsett preferred. This was about as perfect an operation as one could wish. He believed that an operation should be done right, but he did believe that it was possible to do

this work in a much shorter time than was possible by Dr. Taussig's method. In regard to the bladder not being completely dilated after a ventro-fixation, Dr. Dorsett had never known that to occur after any operation that he had done, and he had kept track of his patients. He did not do this operation as Kelly did it, however. There was no excuse for inverting the uterus and sewing the posterior uterine wall to the anterior abdominal wall. One had here elongations of strips of peritoneum for the entanglement of the intestines. When one fixed the anterior wall low down on the uterus there was not this trouble. Four of his patients had been confined after this operation without trouble. When the operation was done as indicated by Kelly there was likely to be trouble, so it was hardly fair, in the consideration of ventro-fixation, to regard it as the operation described by Kelly.

Dr. Frank Glasgow had never done this operation and did not think that he ever would. It appeared to him that it did not follow the path that the operator should lay down for himself. There were many of these cases in old women where, if one kept the uterus in position for a little while, there would be little trouble after that, the uterus diminishing in size remarkably. He did not operate on any case in an old woman where he could make her perfectly comfortable without it, and in almost every case, unless very extreme, it could be done by repairing the perineum and later inserting a pessary. Lately he had one case, a woman well up in the fifties, who had very little perineum, but

the levator ani was distinctly felt on either side. He had used a small, soft ring in this case, and the woman was perfectly comfortable. As to the operation, he did not believe that any organ should be put into an impossible position, but that it should be put into the position nature intended as nearly as possible. He had done ventro-fixation several times and he agreed with Dr. Dorsett as to the Kelly method. A band across the abdomen is a dangerous thing. His own method of fastening the anterior wall of the fundus to the abdominal wall was to fill the bladder with fluid and pass the ligature through the fascia of the abdomen, then downwards beneath the peritoneum covering the bladder, beneath that covering the anterior surface of the uterus to point of insertion into the anterior wall of the uterus, and back the same route. When he tied the ligature it formed a fold extending up from below like nature's abdominal ligaments. But abdominal fixation was not the ideal method. There were other operations than this and vaginal hysterectomy, and some of these Dr. Glasgow thought were a step in the right direction. In one of these the posterior and lateral vaginal walls were dissected off and the tissue on either side brought together behind the vagina. He had done this operation and he had also dissected up the vagina from the rectum, in one case up as high as the cervix, raising the whole vagina off from the rectum and then separating it from either side. He had done this less extensively for years, raising the vagina upward and not cutting away a particle of tissue,



and then bringing the tissue across, forming a broad septum between the vagina and rectum. With the vagina in that position the two folds of tissue should then be sewed together from underneath, or through and through sutures might be used, forming a column. This acted as did a pessary, holding up the cystocele. This portion of the vagina brought forward and folded would atrophy somewhat, stay in place and act as a pessary. But the principal thing was the attachment of the ligamentous tissue on either side. One should go down past where the levator ani came through and then down and include the perineum. This was the only operation that the speaker had done for repair of the perineum for fifteen years. A Chicago man had suggested making a slit in the anterior wall, extending his sutures on either side to include the base of the broad ligaments and bringing the stitches together in front of the cervix, thus throwing the cervix backward. This was a rational procedure, and ought to give good results in old women, where the weight of the uterus was not great. As to ventrofixation, Dr. Glasgow mentioned a case showing how little support was given by scar tissue. There was the removal of a fibroid and then fixation in the abdominal wall. It fixed very nicely but the cervix had now gotten perfectly free from the scar tissue and the patient had a hernia, yet it was a firm scar-tissue fixation. One element must be taken into consideration in connection with this operation. An American woman with a third degree of retroversion would probably be in

a state of melancholia. With the uterus put in the normal position this often all disappeared. The operation suggested by Dr. Taussig placed the uterus in such an abnormal position that the American patient would be worse so far as her mental state was concerned, than before the operation. Those phlegmatic women over there were not affected by anything less than dynamite, so that possibly this operation might prove more satisfactory with those patients. This operation, instead of trying to repair what harm had been done, tried to make something entirely new, and not much improvement on nature's work is possible.

Dr. Reder thought it was always well to pay a certain amount of respect to the organ to be dealt with as far as the position was concerned in those cases where the more radical operation was not resorted to. The operation described would not appeal to him when it was possible by other operative methods to keep the organ in an almost normal position. As to the inversion of the uterus that was the same method Freund used in the repair of very obstinate vesico-vaginal fistulæ. The speaker had performed this operation twice for vesico-vaginal fistula. In the first case he made an opening in the fundus of the uterus for drainage. In the second case no opening was made. The result was equally as good in the latter case. In the German hospital, New York, he had seen many satisfactory operations for prolapse and procidentia. Dr. Munde was a strong advocate of the pessary and his success was very gratifying. He did an an-

terior and posterior colporrhaphy and then introduced a pessary. It was Tweedy, of Dublin, who devised an operation in which he removes a large oval flap of mucous incumbrance from the anterior vaginal wall with a transverse incision across the cervix just below the bladder. The bladder is loosened from its uterine attachments and the abdomen opened between it and the uterus. Douglas' cul-de-sac is next opened in the usual manner. The upper and lower incisions are joined. He had called attention to the fact that the bases of the broad ligaments consist of strong fibers of dense connective tissue firmly attached to the supra-vaginal portion of the cervix. Having loosened and separated this portion these bands are brought together anteriorly with suture. Before tying the sutures he brings down the uterus and amputates the cervix. The fundus of the uterus is next secured to the anterior vaginal wall above the uterus, followed by antero- and postero-colporrhaphy. Dr. Reder had employed this operation in one case and said it was surprising how beautifully it turned out. There was no reason why mucous membrane should not be sacrificed if it could not be put to any use. In his perineorrhaphies he sacrificed, by denudation, sufficient mucosa to enable him to have a good view of the underlying tissues. He did not use catgut, but silk. Many failures in this operation were due not so much to imperfect technique but to the catgut sutures being absorbed too soon and allowing the tissues to part.

Dr. Crossen said that the marked

distortion of the parts (both uterus and bladder) was what struck him most forcibly, and the question was whether the condition was serious enough to warrant this extensive disturbance of anatomical relations, and another question was would this marked distortion create trouble. The first question may be answered positively in the affirmative. Many of them would be very much pleased to get any operation no matter how extensive that would do the work satisfactorily in certain persistent cases. There were some cases in which there was a return, and this operation was on trial for the correction of these very severe cases. He was open to conviction and he was glad this operation had been brought up for discussion. But only by a comparison of results years after the use of all three operations would it be possible to know which was the preferable. As to the second question, that had not been fully decided and could not be until the operation had been longer on trial. It seemed to him the doctor had not given enough consideration to Landau's objection. Landau, in reporting his cases, mentioned two in which the prolapse returned. Dr. Crossen had understood Dr. Taussig to say that in the cases of relapse, the anterior portion of the uterus being fastened, the return was due to the defective perineal work, and the cervix fell downward. But in Landau's cases the prolapse was through the opening in the vaginal wall and, consequently, was of the anterior and not the posterior end of the uterus. Another point that Landau made was that in certain cases the symptoms



returned after some months practically as they were before, with the parts still in the position in which they had been placed at the time of the operation, and Landau stated that he regretted that he did not take out the uterus in those cases. It seemed that in the cases where there had been a return of the prolapse, and also where there had been a return of the symptoms without the return of the prolapse, the uterus was very large and he attributed the return of the symptoms to that fact, and because of that he had devised a modification of this operation. This was an amputation of the upper part of the uterus to reduce its weight. Landau had given much study to this operation and the fact that he had devised another and more extensive operation showed that there were serious drawbacks.

Dr. Glasgow thought that probably the reason of the return was that in sewing the uterus in this position there was but this one thing for its support. The bladder was no support. The only thing that held it was stitching of the uterus underneath that flap of the vagina on the other side of the urethra. The stitching extended into the tissue on either side. So far as he could see there was absolutely nothing else. The bladder didn't hold it up, the vagina did not hold it up and if these stitches did not go deep enough into the tissue, they would leave the uterus free to move either backward or downward.

Dr. Glasgow, referring to the effect of paresis on prolapse, said he had seen an extreme case, the uterus outside the body, in an infant ten

days old. Dr. Dorsett had sent him a clipping reporting a similar case. Dr. Glasgow's case was one of spina bifida and there was complete paralysis of the pelvic muscles. There was no tonicity in any of the ligaments. This case simply proved that those ligaments held up the uterus because there was muscle in them. So, in doing this work, something like the levator ani should be used for its muscular support. This case demonstrated most beautifully the effect of taking away the power of the muscles.

Dr. Crossen asked the doctor to state how he had determined certainly that the cervix was four inches long and the body of the uterus but one-half inch long, as given in his paper.

Dr. Taussig, in closing, said that he had known that he would be unable to describe this operation completely. In the first place, the stitch did not merely fasten the vagina to the anterior wall of the uterus. After making the denudation there is left a considerable area of tissue extending almost to the pubic arch. In making the stitch some of this tissue lying deeper would inevitably be picked up, so that one had not merely the vaginal mucosa. After fastening this to the anterior uterine wall, the same thing was done on the other side. Each stitch was a fixation stitch. It was not merely these two stitches that held the uterus in place. Every stitch included the vaginal wall, and so there was really a row of fixation sutures on either side. As to the cause of the return of the prolapse in these five cases, it had been positively determined that the per-



ineorrhaphy was insufficient and there was a certain degree of rectocele in consequence. The fundus of the uterus was found in the position where it was fastened. In Landau's article things were stated too vaguely. He merely stated: "We have been in the habit of doing Wertheim's operation and have had two failures." We should be very careful in giving our experiences exactly. Nothing so adds to the value of a man's statement as a statement of the number of times that a thing has been done. In the two cases in which there was a return, there was a very large fundus and this fundus presented anteriorly and gave rise to the symptoms. These were the only cases that Dr. Taussig had been able to find where there had been a sinking of the fundus. There had been a sense of weight and the presence of a foreign body, but there was no return of the bladder symptoms. Dr. Taussig had included in those 134 cases only such reports as gave complete figures. He had to exclude for this reason Landau's. As far as the drainage of uterine discharge after utero-vaginal plastic was concerned, Dr. Dorsett and Dr. Brown seemed unduly afraid of its insufficiency. There was nothing pressing directly against the cervix, nothing that would keep back a cervical discharge or the normal menstrual flow. In retroversion the blood flowed out of the uterus even though that organ was not in exactly the normal position. As to absence of any contact with the intestine in ventro-suspension, one might put the gauze over the intestines as suggested, but even so the

intestines had been touched in the operation, and it was the irritation that was dangerous so far as shock was concerned. In ventrofixation it was a very small item, but it must be considered and the fact that the mortality had been rather higher than in the simple plastic operation made Dr. Taussig feel that there was in some way greater danger to the patient. As to the time required, he had seen the operation done in considerably less than an hour by Wertheim and his assistants. When one first began doing vaginal work it must be done more carefully, but it must be a shorter operation for the reason that all one had to do was to push the bladder aside and open the vaginal peritonem. The only additional time consumed was in shoving the bladder off and opening the peritonem. With the abdominal operation there was first the incision, then the operator must fix the uterus in the abdominal wall, then the abdominal wall must be closed and the patient placed in a different position. The expert could do this operation (Wertheim's) in less time than the expert could do a ventrofixation. In regard to the constriction of the bladder by the fundus in ventro-fixation, the speaker had not meant that by that operation the bladder was squeezed together but he did mean that after a ventrofixation when the bladder got fuller and fuller it could not rise upward but must press down and must press against the anterior vaginal wall and that thereby a fresh cystocele would be most apt to form. As to Dr. Glasgow's remarks relative to pessaries, Dr. Taussig did not wish to be un-

derstood as one who recommended operation in every case of prolapsus. He had very recently had occasion to use a supporter in a case of complete prolapse. He did not in this case do a Wertheim operation because the woman when first seen had a high fever and he had made a diagnosis of pyelitis. This woman was approximately seventy years of age, and in such a case he would not of course advise operation where relief could be obtained by the use of a pessary. The speaker had recently seen a case of congenital prolapse without a spina bifida. This did not always occur with spina bifida. If Dr. Glasgow's contention was that the spina bifida was the cause of the prolapse, he had much to prove. Dr. Taussig had not much faith in the idea of paresis.

The reason this operation had been devised was because other operations had been tried extensively and had been found to be failures in a larger percentage of cases than they had hoped would be the case. Twenty-five per cent of recurrences was not very satisfactory. The aim should be not to be content with an operation giving good results when there was another operation that gave better results. He would not have urged so strongly in favor of this operation but for the fact that within the past three of four years reports had been coming in of the permanence of cure in these cases. There was here an

operation that brought about permanent cure in a large percentage of cases and it should be given a trial. While Dr. Taussig believed there were no surgeons in the world as great as those in America, and that more operative devices and methods had been discovered or proposed by American surgeons than by any others, yet the American surgeon should not think that no other nation could devise anything. When a thing was found to have a certain value, it should be given a trial. No country should be permitted to get ahead of this one. For this reason he was pleased with the views of Dr. Crossen in this matter. He had to confess that Dr. Crossen had him floored on the manner of his determining the length of the cervix and the uterus. He could only prove that statement by bisecting the uterus. He had merely surmised that the cervix was four inches long and the uterus one-half inch long from the history and the findings in the case, and he believed it was justified. The fundus of the uterus in a woman five or six years past the menopause and who had no metritis would atrophy. If, then, there should be a constant drag upon the cervix there would be an elongation of that due to the traction. The location of the uterine arteries and the point where the vesical peritoneum passed over to the uterus indicated generally the site of the internal os and so marked the cervix from the corpus.

## SYMPOSIUM ON LOBAR PNEUMONIA.\*

## SOME STATISTICS RELATIVE TO THE DISEASE AND ITS COMPLICATIONS.

By JOHN WILSON, M. D., Kansas City, Mo.

To do justice to the part of the subject assigned me, the limited time given, and that divided by the current duties of other matters is entirely insufficient. I will however do the best I can under the circumstances, fully realizing the imperfect and incomplete presentation made in my paper I will as best I can give the death rate, influence of age, sex, occupation, distribution and complications. I take it that a few words in the way of comparative statistics, dating as far back as the literature of 1870, will not be out of the way. I must say they show considerable variance, even in the hands of good men—and not entirely complimentary to scientific advancement.

Loomis, writing of croupous pneumonia in 1855 says: "It is often stated that pneumonia is a far more frequent disease now than it was twenty years ago. That I might arrive at something definite on this point, I have carefully examined the death reports of England from 1840. Also those of New York City. The average mortality from pneumonia in England from 1840 to 1858 was 5.57 per cent. and from 1859 to 1877, 4.77 per cent., a decrease of 14.3 per cent. In New

York City from 1840 to 1858 the average ratio of mortality from pneumonia to all other diseases was 5.85 per cent. And from 1859 to 1877 was 6.20 per cent. An increase in New York of 15.2 per cent. showing at that date pneumonia on the decrease in England, and on the increase in New York." Writing under same date 1885, he states: "The mortality rate of pneumonia is shown by the following statistics: in the hospitals of Stockholm 11 per cent. died, Vienna hospitals 24 per cent. died, Basle hospitals 23 per cent. died. In the U. S. Medical reports from May 1st, 1861 to July 1866, of 61,202 cases that occurred among the white troops in the Civil war a little over 24 per cent. died; of 16,133 colored troops nearly 33 per cent. died. Confederate hospital reports 33 1-3 per cent. died. The statistics of private reports range from 3 1-3 per cent. to 21 per cent." In some states, the mortality average from all reports to which he had access was 20.1 per cent. of deaths. Loomis further states in 1885 at the time he was writing, that the death rate from pneumonia was about the same as fifty years before.

The foregoing was during a

\*Read at the meeting of Jackson County Medical Society, January 30, 1906.



period before the recognition and acceptance of the relations of the pneumococcus to pneumonia, before the profession had the avail of whatever advantage may accrue to such knowledge.

The per cent. of mortality in pneumonia as just given, dates back from 56 years to 11 years prior to 1896. The literature of '96, '97, and '98, as taken from the *American Journal Medical Science* for '97, gives the general death rate for pneumonia from 20 to 30 per cent.

Hare as late as 1905, states, "There can be no doubt that pneumonia is one of the most common and fatal of all acute infectious diseases, and that its frequency and mortality are increasing." All statistics that my limited time allows me access to, go to show that the average death rate or per cent. of mortality of pneumonia varies but little if at all since sixty years ago.

The opinion I find, as to its relative frequency is not one of unity. At the same time, however, I am inclined to believe that some progress is made in that direction, yet not as much as we could wish, in the light of the hygienic enlightenment and the application of the laws of sanitation of today I have been unable to procure any exact data or figures on this point.

The influence of age on the mortality of pneumonia is very great, so fatal is it in the old that some writer has termed it "the natural end of the Old Man." Statistics give the mortality above the age of 60 as high as from 50 to 80 per cent.

I am indebted to Dr. Scott P. Child for a copy of vital statistics

of the state of Michigan for the year 1901—the only special literature in this line I could avail myself of. This report will give a fair idea of certain points to be considered at least of the States bearing a like relation to climatic conditions. A table of deaths from pneumonia taken from this report for 1901 gives the deaths in the state for that year, total 2,412.

#### DEATHS BY MONTHS.

January, 334; February, 397; March, 372; April, 311; May, 197; June, 121; July, 54; August, 39; September 68; October, 96; November, 155; December, 268.

#### DEATHS BY AGES.

Under 1 year, 486; under 5 years, 705; 5 to 9 years, 61; under 10 years, 766; 10 to 19 years, 138; 20 to 29 years, 166; 30 to 39 years, 183; 40 to 49 years, 207; 50 to 59 years, 225; 60 to 69 years, 272; 70 to 79 years, 293; 80 and over, 158; males, 1,352; females, 1,060; excess of males, 212.

These statistics from this report are in some particulars different or at variance with that of Hare who in his late work states that croupous pneumonia occurs with the greatest frequency between the ages of 40 and 50. The Michigan report, at an earlier and at a more advanced age.

*Occupation as influencing pneumonia.*—I find in uncomplicated pneumonia, that exposure to cold and the general vicissitudes of weather conditions, coupled with a general lowering of vital resistance to infection usually due to financial inability to live under better conditions and surroundings, has

greater influence than occupation *per se*.

*The proportion of single or double pneumonia.*—Hare, in his late work states that 495 cases examined at autopsy, and collected by Fowler, Osler, Kerr and Steven in this country and England the disease was unilateral in 83 per cent. unilobar in the proportion of about 50 per cent. and affected the lower lobe in nearly 75 per cent.

Complications follow in about the order mentioned: pleurisy-pericarditis, endocarditis, meningitis, peripheral, neuritis, serious or grave gastric-complications, parotitis, Bright's disease. Relapse rare if at all. Recurrence more common than any other acute disease.

The distribution according to literature is general; where most prevalent is of more interest. On this good authority differs. Osler says, it prevails equally in cold and hot countries; on this continent is more prevalent in the southern than in the northern States. Hare, in his late work, says it is met with in all parts of the world, more common in the temperate than in the tropical zones. In the U. S. the census for 1900 shows that its greatest mortality is in the great north western states east of the Rocky mountains. The Michigan report, alluded to before, and which is perhaps a fair index from which to draw conclusions, gives in the State of Michigan more

pneumonia cases occurring than any of the other respiratory or chest diseases—tuberculosis excepted—in the years of 1898, 1899, 1900 and 1901. The number of deaths in those years were, in '98, 1805; '99, 2192; 1900, 2035; and in 1901, 2412.

Of one thing however there is a general agreement, that the fatality is greater in the north western states east of the Rockies.

While recognizing the incomplete and in some measure the inaccuracy of the statistics given, I am however satisfied as to their general correctness as they occur in the literature of the subject, and are a fair indication of the status of pneumonia along the line intended to be covered in my paper, dating back 60 years and up to the present time. I must say but little progress seems to have been made, since the earlier days when pneumonia was considered a local inflammatory disease, and later years when its infectious nature has been ceded, and its specific cause is claimed to have been brought to light by bacteriologic investigation and microscopic findings. It must, however, not be argued that no advance has been made in any of the phases of this disease. Pessimism must not be permitted to assert itself for the light of a perfect day will yet reward the perseverance of the internalist aided "by biology bacteriology and microscopy."

## ETIOLOGY AND MORBID HISTOLOGY.

By FRANKLIN E. MURPHY, M. D., Kansas City, Mo.

The greatest problems now engaging the attention of the medical profession are tuberculosis, pneumonia and carcinoma and of these it would appear that pneumonia in recent years, as a problem, is increasing in importance.

Nearly a century ago Laennec, to whom we owe so much for what we know of this disease stated, "This is one of the most serious and commonest diseases and in the frigid and temperate climates causes more deaths than any other acute disease." Thirty years ago Jurgenson said of it: "Next to phthisis it is one of the most dangerous enemies of man." Today pneumonia causes more deaths than tuberculosis.

Through our knowledge of the pathology of tuberculosis and the life history of the tubercle bacillus we have been enabled to reduce the mortality from consumption and the reduction happily goes on.

Surely in approaching this question of pneumonia we should have at hand all the available knowledge of the etiological factors operating and should follow as closely as possible the lung changes in the evolution of the disease.

Fibrinous, croupous, lobar or genuine pneumonia is an acute epidemic or sporadic febrile disease the determining anatomical character of which is exudative inflammation in which the hemorrhagic fibrinous exudate in the alveolæ, infun-

dibula and finest bronchioles, coagulates into a firm mass. So long as the exudate is firm, the lung, upon section, appears granular for the reason that the walls of the alveolæ and infundibula retract slightly causing the contents to present as granules.

The process usually involves one entire lobe or the greater part thereof (lobar pneumonia) and often the alteration is uniform throughout the affected area. All the lobes of one lung may be involved, indeed all the lobes of both lungs. Not infrequently there results from a pneumococcic infection, small, broncho-pneumonic, lobular, areas of inflammation and occasionally from the section of a consolidated lung the confluence of many smaller areas can be clearly recognized.

The right lung is oftenest affected and the lower lobes of both the right and left lung oftener than the upper lobes.

The course of croupous pneumonia is typical and for a hundred years pathologists have recognized three stages in the inflamed lung, viz.: 1. Engorgement. 2. Red hepatization. 3. Gray hepatization.

In the stage of engorgement, or hyperaemic œdematous stage, there is in the alveolæ, serous exudate (inflammatory œdema) which contains many red blood corpuscles. We find further leucocytes of the polymorphonuclear variety, desquamated,



swollen epithelial cells rolled into masses and hyaline alveolar epithelium.

Fibrin threads are present which become more and more numerous as the disease advances. The fibrin is doubtless derived from the blood, rather than from changed epithelium as was formerly assumed.

Alveolar epithelial cells offer support to the capillaries of the lungs. Changes in this epithelium deprives the capillaries of support and they become greatly distended. There is increasing transudation of fluid parts of the blood and in addition red corpuscles escape freely. Aufrecht states that the stage of red hepatization is not the result of exudation but is due to the coagulation of blood which escapes from ruptured capillaries. The hemorrhagic character of this stage is shown by the appearance of blood in the sputum.

The lung is filled with blood, dark blue red in color and heavier than usual. When pressed there oozes from the cut surface a sticky, grayish red, slightly foamy fluid. The lung contains much less air, the tissue almost without crackle when squeezed. Small portions of the lung still float upon water. The sputum is rusty, or prune juice in character. This stage lasts twenty-four to forty-eight hours.

In the stage of red hepatization the lung is dark red in color, the vessels turgid, the fibrin formation is greater. Network of fibrin threads appear, the fluid grows denser and denser until the consistence of the lung is that of liver tissue. The lung is devoid of air, stringly heavy and voluminous and pieces of lung

no longer float. The tissue tears easily, the lung pits upon pressure as does an oedematous leg. The velvety, or granular appearance of the cut surface is here most pronounced. Lightly scraping the cut surface with a knife blade, granules and occasionally fine spirals with cloudy sanguinolent fluid are seen. These granular contents of the alveolæ are firm and become softer as the color of the lung becomes grayer. This granular appearance is best seen upon a broken surface of the friable lung.

In this stage, with pulmonary tissue infiltrated with fluid exudate in the alveolæ and over-filled blood vessels, there is reason to believe that the lobe or lung is increased over its size in full inspiration. At times the imprint of the ribs appears on the surface of the lung.

The exudate in this stage at first contains many red blood corpuscles, leucocytes, detached, swollen and granular epithelial cells. If the blood be washed away the color of the lung is gray. Sections treated with Weigert's fibrin stain show threads of fibrin extending from an acinus to adjoining ones, fibrin masses in blood and lymph vessels and threads of fibrin in the alveolar septi. In the beginning of the stage of red hepatization, the pneumococci are present in great numbers and are at their maximum virulence (Welch), many in the body of the leucocyte.

Another microscopic picture noted is that the distribution of fibrin and leucocytes in the alveolæ is not uniform. At times in the bronchioles and infundibula one sees practically only leucocytes and di-

plococci, while in the alveolæ is mostly fibrin and no cocci. This conjunction of leucocytes and cocci is looked upon as chemotactic workings of the micro-organism. This stage lasts three or four days.

The stage of gray hepatization resembles in many particulars the preceding stage. In size, consistence, weight and friability there is little difference. The red color however is replaced by a light gray. The granular appearance is gradually lost and from the cut surface, which appears moist, as compared with the preceding stage, a cloudy grayish yellow, later yellowish, pyoid material is easily pressed out.

Microscopically we see here no blood but many leucocytes (many fatty). The fibrin is lessened, amorphous and granular, no longer showing net-work of fibres. The large numbers of leucocytes which gives to the fluid a purulent appearance comes from the capillaries and veins, the blood of which contains increased numbers of leucocytes (inflammatory leucocytosis).

The exudate degenerates into an emulsion of fatty degenerated cells and molecularly decomposed fibrinous exudate and becomes absorbable. It must be remembered that this fluid is not pus. While it is true that occasionally in pneumonia the fluid becomes purulent, this is not a part in the evolution of typical croupous pneumonia. The diplococci become rapidly less and less in number. Clinically the stage is marked by critical fever fall, profuse sweating and great sediment in urine.

The emulsion like exudate is in small part expectorated and in

much greater part absorbed, and absorbed with such rapidity that this affords one of the most remarkable features of this disease of so many pronounced features.

In about fourteen days the lung is again air containing, but still engorged and somewhat friable which quality it rapidly loses.

*Duration.*—Pneumonia persists usually one to two weeks. Cases occur in which the disease runs a shorter course or a more protracted course. Leube has reported cases of pneumonia in which the initial symptoms and the critical fever fall occurred within twenty-four hours, these cases without doubt croupous pneumonia. In a recent number of the *Munchener Medicinische Wochenschrift*, ten cases of so-called "one day pneumonia" are reported from Leube's clinic at Wuertzburg.

The difference in the length of the period of the disease seems not to be due solely to the susceptibility of the individual but to some inherent biologic character of the diplococcus pneumoniae.

Death may occur in any stage of the disease. In about one-third of fatal cases death occurs in the stage of gray hepatization, in consequence of heart insufficiency, if resolution is delayed beyond the seventh day at which time it usually occurs. The greater number die on the tenth to twelfth day of the disease.

*Bacteriology.*—For the production of genuine pneumonia the presence of specific micro-organisms is necessary. In by far the greater number of cases, the pathogenic organism is the diplococcus pneumoniae of Fraenkel-Weichselbaum, or the diplococcus lanceolatus as it

has been called.

This is a round, later oval or lancet shaped organism, mostly arranged in pairs, or perhaps in chains of three or four or more links. In the body of the animal the organism shows a capsule which is as a rule absent in the artificially cultivated organism. The organism is found throughout the world and has been found in the throat and nasal secretions of individuals who have never had pneumonia. Van Besser found it in the nasal secretions of 14 per cent. of 57 individuals examined.

It seems clear that the micro-organism was first isolated in 1880 by Sternberg who inoculated rabbits with his own sputum. Pasteur discovered the same organism a few months later in the sputum of a child. At this time the relation of this micro-organism to pneumonia was not suspected. Four years later, in 1884, A. Fraenkel showed that this organism, already described by Sternberg and Pasteur, was the most frequently encountered organism in acute pneumonia.

In 1883 Friedlander described a micro-organism which is now called the pneumobacillus. He saw the organism that was later cultivated by Fraenkel but Friedlander in cultivating the micro-organisms of pneumonic sputum employed gelatine at room temperature, whereas, Fraenkel employed higher temperature, this marking one of the important cultural differences between the Friedlander pneumobacillus and the diplococcus pneumoniae of Fraenkel-Weichselbaum.

Great controversy now arose as to the relative importance of the

Friedlander pneumobacillus or the Fraenkel diplococcus in the production of croupous pneumonia. The controversy waxed warm until 1885 when Weichselbaum, from a very extended study of the bacteriology of the disease, reported that in 129 cases of pneumonia he found the diplococcus pneumoniae in the lungs 94 times. He found it also in pleurisy, pericarditis, endocarditis, meningitis and arthritis complicating pneumonia. Thus the name of Weichselbaum came to be associated with the name of the micro-organism.

The cultures of this diplococcus rapidly lose their virulence and the organism dies. The full virulence of the diplococcus may be retained by repeated passage through the body of particular animals, and the characteristic form, which is lost by continued cultivation on artificial media, is thereby fully restored. Mice and rabbits are particularly susceptible to the action of this organism. The diplococcus pneumoniae is Gram positive while the Friedlander organism loses its color by the Gram method. The organism is most abundant in the lung in the stage of red hepatization.

The virulence of the pneumococcus in pneumonic sputum varies in different cases. A writer in a recent number of the *Zeitschrift f. Klinische Medizin* reports some interesting observations upon this point. He found that white mice inoculated with 1 c. c. of the sputum from a very grave case of croupous pneumonia died in eight to ten hours. The same amount of sputum from a case of moderate severity destroys the mouse in 11 to 20 hours, while



1 c. c. of sputum from a mild case proved fatal to the animal after 20 to 45 hours. He also shows that the virulence of the sputum does not disappear with the crisis but persists for 24 hours or longer. The crisis in pneumonia is not due to the loss of virulence of the diplococcus. He suggested the value of inoculation of mice with the sputum as a prognostic measure as well as to determine relapse in pneumonia.

The diplococcus may excite serofibrinous inflammation and purulent inflammation if the organism infects a serous surface. Acute nephritis may result from the presence in the kidney of this organism.

It has long been known that serofibrinous or purulent meningitis results from the diplococcus pneumoniae, independent of the presence of pneumonia.

Occasionally the Friedlander pneumobacillus appears to induce croupous pneumonia. Pneumonia may follow streptococcic infection. In this form of pneumonia we find many small areas of inflammation in the lung. The influenza bacillus may accompany the diplococcus pneumoniae and it has been stated that the influenza bacillus may of itself induce pneumonia. It has been observed that with the influenza bacillus complicating pneumonia a diffuse purulent bronchitis is the accompaniment, this bronchitis involving other areas than the pneumonic areas.

*Blood.*—The diplococcus by modern methods may be isolated from the blood in practically every case of pneumonia. In the majority of cases leucocytosis is present, the polymorphonuclear neutrophils

showing the increase. It has been thought that leucocytosis is a favorable indication, a leucopenia an ominous symptom. At this time according to statements of recent investigators there is no positive evidence supporting the claim that the presence of leucocytosis influences the course of the disease. It has been observed that the blood platelets are nearly always increased in pneumonia.

*Weather.*—From statistics gathered from American and European sources it appears that about 70 per cent. of the cases of pneumonia occurs in the cold months, and 30 per cent in the warm months. The number falls to the minimum in July, August and September. Mere temperature alone seems not to be responsible for the change in frequency of the malady. In certain countries in the arctic regions, in Iceland, where the temperature average is low, the disease is not common, while in Italy and India pneumonia is a frequent disease. Attention has been called to the fact that in the localities where pneumonia is observed the larger number of cases occur at the time of the year when the greatest sudden shifting of temperature is experienced.

The role which chilling of the body plays in the production of pulmonary disease has been studied experimentally by Lode in the laboratory of hygiene in Vienna. He shaved one-half or two-thirds of the bodies of animals, placed them in the incubator for one-half hour, dipped them into water and placed them in direct draughts of air. Then into the animals he injected, subcutaneously, 1 c. c. of a culture of

the pneumobacillus. In 24 to 48 hours the bodies of the animals showed pleural and peritoneal exudate in which countless pneumobacilli were found. Control animals to which the injection was given without previous preparation of the animal remained unaffected. Guinea pigs, chilled in the same manner, were made to breathe the dust of a culture of the pneumobacillus. These animals died within two to three days of double pneumonia with hepatization.

Experiments with staphylococci were made on animals in the same manner, the chilled animals as a rule succumbing, the control animals as a rule remaining sound. If the shaved animal, after chilling, was enveloped in warm woolen covering, the susceptibility was strikingly lessened. In these experiments 85.8 of the chilled animals succumbed while in the control animals but 12.2 succumbed. Lode concludes that "here as in other fields of biological research we must conclude that the pathogenic organism is only one factor in the production of infection and that other conditions are operative in the body which we group under the general term individual predisposition."

*Sex.*—More men than women suffer from pneumonia. Statistics show that of the cases 72.2 per cent. are men, 27.8 per cent. women. Without going further into the statistics of this feature of pneumonia it seems clear that this is only due to difference in occupation and not the sex, for it is an accepted fact that those who by their work are exposed to the weather furnish the

larger number of cases of this disease.

*Age.*—From the world's statistics it appears that a little more than 50 per cent. of the cases occur between the ages of 20 and 40 years and over 80 per cent. are from the 10th to the 50th year, ages at which individuals as a rule suffer most exposure.

One attack of pneumonia in no wise protects the individual from subsequent attacks. On the contrary it gives predisposition to other attacks of the malady. This is remarkable when we see surprisingly few relapses in croupous pneumonia.

An established fact is the development of pneumonia after contusion of the chest. The disease usually develops on the side of the injury. Thus Mennier studied 25 cases of the disease and found in 18 traumas of the right side, right side pneumonia occurred 15 times and bilateral involvement three times. In seven left-sided injuries seven left pneumonias occurred.

A word may be said here of so-called ether pneumonia. Osler states that at Johns Hopkins Hospital they have averaged 3 or 4 cases a year. Czerny it is stated has restricted largely the use of ether in his clinic on account of injurious after effects on the respiratory system. Pathogenic organisms are almost always present in the lungs. It seems most probable that prolonged etherization, by chilling the pulmonary tissue and lowering the vitality of cells in the bronchioles renders the tissues incapable of withstanding the attack of bacteria.

## DIAGNOSIS OF LOBAR PNEUMONIA.

By H. D. JEROWITZ, M. D., Kansas City, Mo.

The diagnosis of lobar pneumonia is, as a rule, easy; nevertheless, its presence is oftener overlooked than one would believe. The average typical case of two or three days' standing presents such a complete picture that even the layman can diagnose it; it behooves the physician, therefore, to recognize the condition early, before the patient or friends suspect it. We are able to do this with other diseases; for instance, we diagnose measles by the Koplik spots, and we should, as a rule, be able to recognize pneumonia in its inception, because its onset is quite characteristic. Given a robust individual, previously well, who is suddenly taken with a chill lasting perhaps half an hour and followed by a temperature of from 102 to 105, with malaise, a slight cough, or a feeling of tightness in the chest, it is wise to examine the throat, and if we find no indication there nor any other local cause, then we suspect pneumonia, which, even without any physical signs, is the most probable condition. Quite frequently a patient thus afflicted attends to his duties the first day, being up and about, and, not deeming himself so very ill, seeks the doctor in his office for a prescription. While the same is also true with many typhoid fever cases, the history is nevertheless different. At any rate, we may enunciate this

principle and teach it to the students: When an adult presents himself with a temperature of 103 or more, if no sore throat or other local trouble (epididymitis, for instance) is present, suspect either pneumonia or typhoid fever, according to the onset, and make a careful examination with these in view. Let us avoid the term "touch of pneumonia." There is no "touch" of anything; it either is or is not a certain thing. We should also be careful about pronouncing it a "mild" case, just because we find few or no physical signs, for, if our presumption is correct, they soon develop with a vengeance. We should further be careful of calling these cases "grip" or malaria, or else in a day or two when the classical symptoms of pneumonia appear we find ourselves saying something about its having "developed" from the other—a wonderful doctrine, that of transmutation of diseases, so well exploited by the laity and strengthened by the silent acquiescence of our worthy profession.

Let me refer to another axiom: A high fever lasting more than one day should lead us to look for lobar pneumonia or typhoid fever; occasionally, acute miliary tuberculosis.

To go one step further, we might say that the combination of high fever, rapid pulse, and increased respiration is strongly indicative of



an acute pulmonary disturbance, the last mentioned symptom alone being almost sufficient.

We should also make it a rule to suspect pneumonia in all cases of delirium or delirium tremens when accompanied by elevated temperature. The latter is often the only symptom of a drunkard's pneumonia.

A continued high fever of 105 to 106 in a child, ushered in suddenly with or without convulsions, and without any apparent cough is lobar pneumonia, usually of an upper lobe, and careful percussion may be the only way of eliciting it. Our diagnosis in these cases is often confirmed only when the temperature drops suddenly to normal about the fifth, sixth, or seventh day. The

fact that some patients have no cough nor pain should not mislead us; the former is not an early symptom, while the latter is only present if the pleura is involved. We have to deal principally with the toxemia—the pneumonic infection—the severity of which does not, as a rule, depend upon the amount of local involvement.

Of course, we all meet with obscure cases where the differential diagnosis is difficult, and it is to these that we wish to devote a little time in this discussion.

1. *Cases resembling typhoid fever.* Confounding with this affection is frequent, especially when the lower right lobe is involved, which is true in the majority of cases. Let us note the points of difference:

	LOBAR PNEUMONIA.	TYPHOID FEVER.
Previous Attack.	May have had.	Does not recur. If patient has had typhoid, then the case is probably pneumonia.
Onset.	Sudden, usually with chill lasting about half an hour and followed by fever.	Slow, insidious.
Prodromes.	None. Patient may have had slight cold.	Epistaxis, anorexia, bowel disturbance.
Temperature.	High and irregular; very changeable; sometimes higher in axilla of affected side.	More uniform and of characteristic curve.
Pulse.	Rapid and strong (120-140).	Slow and weak (60-90), sometimes dicrotic.
Respiration.	Fast. Lagging of chest on affected side, retraction of sterno-cleido-mastoid and scaleni, dilatation of alae nasi, cyanosis of cheeks or lips.	Normal ratio; expansion even on both sides.
Spleen.	Somewhat enlarged.	Usually hard and enlarged.
Bowels.	Sometimes diarrhoea. Spots occasionally present, but not like the roseola.	Diarrhoea, when present, is characteristic. Constipation frequent, tenderness over caecum, roseola.
Sputum.	When present is characteristic, sticks to side of vessel, contains fibrin clots, dendritic in character, may be seen best when shaken in a test tube with water. Contains also Fraenkel-Weichselbaum pneumococcus.	None of importance.

Urine.	Chlorides decreased, urea increased. Albumen rarely.	Albumen often present. Diazo reaction.
Herpes.	Herpes labialis or nasalis often present on second or third day.	Usually absent.
Decubitus.	Patient lies on side, usually the affected one.	Usually on back.
Pain.	When present, over affected area; often referred to abdomen or lumbar region, especially in children.	Headache, abdominal tenderness.
Cough.	Short, tight, suppressed.	Usually present, dependent upon bronchitis.
Mensuration.	Slight increase on one side.	None.
Widal Test.	Negative.	Often positive.
Blood. (Leucocytosis).	Blood rich in fibrin. Leucocytosis increased.	Leucocytes normal or diminished (leucopenia), as low as 5000 to 1800.

A few hours after the initial chill, the number of leucocytes increases to twenty, thirty, or even sixty thousand per cmm., falling considerably after twenty-four hours, but remaining more or less above the normal while the fever lasts. Shortly before the crisis the polymorphs constitute about 80 per cent. of the total number of leucocytes. After defervescence the proportion falls gradually to about 57 per cent., at which time there is observed an increase of lymphocytes and eosinophiles, the latter varying from 3 to 7 per cent. In cases terminating fatally there is little or no increase of leucocytes.

## 2. *Pleuritis with Effusion.*

	LOBAR PNEUMONIA.	PLEURITIS WITH EFFUSION.
History.	Usual Onset.	Slower process.
Inspection.	Lagging on affected side, etc.	Intercostal spaces flat or bulging.
Palpation.	Fremitus increased, bronchophony (except in massive pneumonia.)	Fremitus diminished or absent.
Mensuration.	Somewhat enlarged.	Considerably enlarged.
Percussion.	Tympanitic at first, dullness later. Often nothing found.	If on right side, lower border of liver is lower, heart displaced to left. If on left side, dullness encroached on semi-lunar space, heart displaced to right. Upper line of dullness changes with position of patient, unless incarcerated by adhesions.
Auscultation.	Bronchial breathing, rales, pleuritic friction.	Vesicular breathing, but faint and distant. May be absent.
Expectoration.	Characteristic Sputum.	None.
Temperature.	High.	Not so high.
Leucocytes.	Increased.	Normal or slightly diminished, unless empyema.
Chlorides in Urine.	Decreased.	Normal.
Puncture.	Blood.	Serum or pus, if reached.
Phlegaphonia.	Positive.	Negative.

Phlegaphonia is of use where the patient is either unable to speak or it is not advisable for him to do so.

An assistant places a pleximeter on the thyroid cartilage, and percusses with the hammer. The patient is

directed to close the mouth. The examiner auscults over the dull area during expiration, and, if the lung is consolidated a loud tympanitic sound is heard, the ear having a sensation of receiving the blows directly. The vibrations produced this way take the place of those of the vocal chords during phonation.

3. *Purulent meningitis.* This is rare. It is accompanied by intense headache, rigidity of the back of the neck, and stupor increasing to coma. There is also leucocytosis. Here we must be guided by the history and course.

4. *Miliary tuberculosis.* This is rather difficult to diagnose *per se*, but the history, the course of the fever, and the presence of tubercle

bacilli will aid us greatly in the exclusion of pneumonia.

5. *Endocarditis.* Patients with an old heart lesion resulting from rheumatism are easily susceptible to pneumonia, and what is often pronounced an acute attack of heart trouble is in reality a pneumonia, which, in these cases, is not suspected. The tumultuous action of the heart, the increased prominence of the murmur, and the distress of respiration are due to the pneumonia infection, aggravated some by the heart lesion.

6. *Irritant poisons and burns of the chest.* Cerebral symptoms following these are usually dependent upon a pneumonia or congestion of the lungs.

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## THE PROGNOSIS OF LOBAR PNEUMONIA.

B. E. W. SCHAUFFLER, M. D., Kansas City.

The longer a man has been practicing medicine the more likely he is to agree with Tyson in his characterization of lobar pneumonia as a "treacherous and uncertain disease."

The impression which is prevalent in the community generally as well as in the medical profession that more people die of pneumonia than there did twenty-five or thirty years ago is correct. This does not, however, imply that a greater proportion of the cases of pneumonia prove fatal now than formerly, but only that more people suffer from the disease now than there did fifty years ago. This may be partly due to the prevalence of epidemic in-

fluenza during the past sixteen years, but still more so to the increase of our urban as compared with our rural population; the crowding together of vast numbers of people in unwholesome tenements, often poorly fed, and more addicted than their country brethren to the use of alcoholic stimulants and to excesses of every sort. In Chicago during the decade ending in 1900, pneumonia replaced phthisis as the principal cause of death, the figures being 18.03 per 10,000 inhabitants as compared to 12.36 per 10,000 during the previous decade. Careful statistics from some of our larger cities, however, show no increase in the ratio of



deaths to the number of cases of pneumonia.

The mortality of the disease may be stated as being, in hospitals from 20 to 40 per cent., in private practise from 6 to 15 per cent.

Anders quotes Wells who gives, as the result of the collection of 223,730 cases, a mortality of 18.1 per cent. The lowest mortality rate cited by various authors, is that of 40,000 cases occurring in the German army with 3.6 per cent. of deaths. These, of course, were among picked men, in the prime of life, under more than ordinarily favorable conditions.

Among the conditions which influence the prognosis may be mentioned:

1st. *Race.* Negroes succumb to the disease more readily than whites, even where other conditions are alike for the two, as, for instance, in the army. The same seems to be true of Mongolians and is undoubtedly true of the North American Indians. 2nd. *Sex.* The disease is more frequent in men but more fatal in women. 3rd. *Age.* Early childhood and old age, especially the latter, give the greatest mortality. 4th. Pre-existing acute febrile diseases, as the exanthemata, typhoid fever, sepsis, etc., influence the prognosis very unfavorably. 5th. The same is true of chronic diseases, as rheumatism, diabetes, nephritis, etc. 6th. *Alcoholism.* The high mortality among alcoholics is too well known to require comment. Dr. Andrews H. Smith of New York gives the following table: In 428 cases the death-rate was: In the markedly alcoholic, 70 per cent.: in the mod-

erately alcoholic 32 per cent.; in the non-alcoholic 30 per cent.; in old age as well as in alcoholics cyanosis is liable to set in early with all the symptoms of heart failure, as very rapid and irregular pulse, rapid or very labored respiration, etc. 7th. *Extent of Lesion.* This undoubtedly cuts considerable figure in the prognosis, although I do not think it is quite as conclusive as is often claimed. The violence of the attack and the degree or the virulence of the general infection seem to me to be of much more consequence. We have all seen cases involving the whole of one lung, or part of both lungs make a comparatively uneventful recovery, while in others where the extent of the consolidation was so limited as to escape early recognition, the fatal end has come quickly.

a. Double pneumonia is undoubtedly, as a rule, more fatal than that confined to one side, although it is far from being as hopeless as is generally believed. The mortality may be averaged at about 50 per cent.

b. Apex pneumonia, or that involving the upper lobe alone, is not, in my opinion especially dangerous.

c. Migratory pneumonia always keeps the attendant anxious, until the limit of advance is reached and each case must be judged by itself.

d. Massive pneumonia, where the bronchi are filled solid, is perhaps always fatal.

e. Grippe pneumonia, according to my experience, is not uncommonly fatal, although the recovery is usually quite slow. Some authors think it is more liable to be followed

by pulmonary tuberculosis. I do not believe this is true in private practice among the middle and better class of people.

*f* Typhoid pneumonia does not imply a complication with typhoid fever, but only a low degree of vitality in the patient or an overwhelming toxemia, with the consequent typhoid symptoms of stupor, muttering delirium, dry tongue, etc. The prognosis is bad, about 80 per cent. dying.

Among the unfavorable complications may be mentioned meningitis, which is almost always fatal. The same is true of delirium tremens. But it must be remembered

that not all active delirium is to be credited to either of these heads. The previous existence of endocarditis, or its occurrence in the course of a pneumonia, is very unfavorable. Empyema does not greatly vitiate the prognosis.

Unfavorable symptoms are an accentuated second pulmonic heart-sound, very rapid pulse or respiration, especially the former, great dyspnea, early cyanosis and extreme restlessness and delirium. On the whole the prognosis in the individual case, can best be estimated by observing the conditions of the general circulation and the way in which the heart is doing its work.

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## TREATMENT OF LOBAR PNEUMONIA.

By B. H. WHEELER, M. D., Kansas City.

This disease may rightfully claim the distinction of having the greatest diversity in the methods of treatment, and more than any other suffers from the common abuse of over-treatment. No treatment of pneumonia can be rational without a true conception of the morbid process. This has already been made clear by Dr. Murphy.

It is evident, then, that our chief efforts must be directed against the toxemia by neutralizing the toxin, by limiting its production, by aiding its elimination, and by antidoting its poisonous effects. It is important that we also recognize the fact that pneumonia is a self-limited disease, incapable of being aborted, running a definite course, and very

often terminating spontaneously without any medicine having been given.

Dr. Manges very aptly says "we should bear in mind that we are not treating pneumonia, but rather a patient with pneumonia; that some will die in spite of all treatment and not a few perish as the result of it."

Under the consideration of the general care of the patient, I am convinced that one of the most important factors in the successful management of these cases is plenty of pure air, free ventilation without exposing the patient to drafts, and if the sick chamber be heated by furnace, provision should be made to supply additional moisture. The temperature of the room should not

be allowed to rise above seventy degrees F., except at such times when it is necessary to expose the patient.

Plenty of pure, cold water should be freely given, and should the patient be delirious, it should be insisted upon at regular intervals. If there is a distaste for water, add the juices of fresh fruit. Carbonated water, however, should be studiously avoided, for the reason that the system already suffers from an overproduction of carbonic acid gas, and its powers of elimination are already taxed.

The food should be exclusively liquid, and consist chiefly of milk. The importance of proper diet cannot be over estimated, and the digestive organs should be spared all unnecessary effort; failure to give them proper consideration may result in imperfect digestion, with resulting fermentation and distention, which by intra-abdominal pressure, may greatly embarrass both circulation and respiration.

A tepid sponge bath should be given daily for the sake of cleanliness and comfort, and to encourage diaphoresis, except, however, during the period of the crisis.

The nurse should be instructed to carefully and frequently cleanse the mouth and teeth with some pleasant alkaline antiseptic solution, and if there be present an uncomfortable dryness of the tongue, to paint it over with glycerine.

The clothing should be warm but not cumbersome, and the general surroundings made as cheerful as possible.

If the patient be aged or feeble, the nurse should be instructed to

change their position in bed occasionally, as too long in one position induces hypostatic congestion.

Unnecessary exertion on the part of the patient should be forbidden; this is especially applicable in beginning convalescence.

As I approach the subject of medical treatment, it is with no small degree of hesitation; for, after centuries of close observation and earnest investigation, we have as yet no specific treatment for pneumonia. Yet, there are remedies which, in the hands of our foremost clinicians, have yielded results which entitle them to respectful consideration.

The four agents which are most often employed, and no doubt do exert a favorable influence upon the course of the disease, are antipneumonic serum, quinine, digitalis and creosote carbonate.

Antipneumonic Serum is too new to render an opinion which would be reliable; many physicians of note proclaim its virtue, and assert that the results thus far noted encourage them to continue its use. Fortunately, it is never harmful, if ordinary care is observed in its administration. The very few reports I have at hand places the mortality at 13.5 per cent., which is not at all convincing and leaves me open to conviction.

Quinine, as a routine treatment, is held in high favor by many, prominent among whom were Nothnaegel and Yeo. The basis for its employment is founded upon its apparent inhibitory influence, upon the activity of the bacteria or their toxines, and not as an antipyretic alone. They have been led to believe that



quinine in some degree is an antitoxin to the toxins of this, as well as many other, infective organisms, but in what precise manner they do not attempt to explain. We know that it does stimulate leucocytosis. Great stress is laid upon the method of administration, and each claims advantages and results that can be obtained in no other way. Nothnaegel preferred the (neutral) tannate of quinine, which is tasteless in 15 grain doses (being equivalent to about 5 grains of the muriate) combined with an equal quantity of the saccharated oxide of iron (10 per cent.) given as a powder three times a day throughout the course of the disease. Yeo gives preference to the sulphate in 1 to 3 grain doses every two to four hours, according to the severity of the attack. This he combines with citric acid and saccharum lactis, aa gr. x. This is then dissolved in a small quantity of water, to which is added the following: Potass. bicarb. gr. x.; ammon. carb. gr. iv.; Syr. aurantii, dr. i, and water, q. s. one ounce. The addition of this alkaline solution to that of the quinine with citric acid, produces effervescence which greatly improves its palatability, and enhances its medicinal value.

Professor Weber of the New York Post-Graduate, recommends doses of 15 grains of the sulphate twice daily during the entire course of the disease. Quinine in my hands, has usually seemed harmful, owing to the production of gastric disturbances, and an increase of nervous manifestations. Yet, I am free to confess that this may have been due to an improper method of administration.

Digitalis, which is now enjoying some popularity, was first employed in the treatment of pneumonia by Rasori but at that time did not find general favor. Lately, however, this drug has again found a very enthusiastic champion in Petrusco, who advises its use in all cases of pneumonia when seen early, in such enormous doses as 60 to 180 grains of powdered leaves, by infusion, three times a day, for the first two days only, and claims by this method that the course of the disease will be favorably modified, if not aborted, provided, however, that there be no pre-existent organic cardiac lesion, arterio-sclerosis, or kidney disease, in the presence of which such doses are contra-indicated. His mortality rate, while in the beginning was quite remarkable (only 1.21 per cent.), has since increased to 2.06 per cent., which even yet, is extremely low. It should be taken into consideration that these cases were tabulated in a Central Military Hospital. Frankel, who also prefers this remedy, administers 50 to 60 grains of the powdered leaves by infusion, daily for the first three days of the disease, except to persons over fifty years of age, and to alcoholics. Nothnaegel and Von Juergensen advise against its use as a routine practice, yet believe that it has a field of usefulness at certain times in selected cases, and the latter gives us a valuable guide for its employment as follows: "In a person previously suffering from cardiac weakness, or who in the course of the disease, develops cardiac insufficiency, if the pulse, without obvious reason, becomes greatly accelerated, and at the same time irregular, dig-

italis is indicated; the indication or contra-indication depends upon the pulse remaining full or empty; if the volume is good, then one may expect something from the remedy, especially toward the end of the disease, in which one of the favorable signs is not rarely a slight irregularity of the pulse."

I am incompetent to render an opinion as to the advisability of employing digitalis as a routine treatment, based upon personal experience. The few attempts I have made to use it have engendered a prejudice against it, yet I have never used it in the quantities recommended. Procuring a reliable drug is always attended with an element of uncertainty, the gastric disturbance which is usually produced is undesirable, and its effects, in any disease attended with high temperature are always questionable.

The remedy, which, in my limited experience, comes nearest to a specific, is the carbonate of creosote. This remedy was first used extensively by Dr. Van Zandt, of Fort Worth, Texas, since 1894. He was led to do so by observing a marked improvement in a pneumonia patient to whom he had given creosote for intestinal disturbance. Subsequent trials greatly impressed him with its efficacy, and it is his routine practice to use an average dose of two and a half drams in twenty-four hours, given either in two or four doses. He has collected reports of 1130 cases treated by this method, with a mortality of less than 5 per cent.

Doctors Cassoute and Corgier, of Marseilles, France, in a published

report, state their belief that pneumonia, in all its complicated forms, has lost its danger in the presence of the various derivatives of creosote.

My attention was first attracted to this method of treatment by Prof. Reynold W. Wilcox, of the New York Post-Graduate School and Hospital, in 1904, who, at that time, was very enthusiastic concerning its use in a large Hospital and private practice; in a recent communication, he advises me that he yet holds this remedy in the same high favor. He has tabulated 250 cases, with a mortality of less than 5 per cent. in private practice. In hospital practice the mortality was about 15 per cent., owing to the large number of alcoholics included in the series. Personally, I am convinced that it does influence favorably the course and symptoms of the disease, and it is free from many of the objections that may be made to other remedies. Its first advantage is being so well tolerated by the stomach, even with unnecessarily large doses; there is entire absence of caustic or irritating effects. It is antiseptic. It is not acted upon by the stomach, but arrests bacterial decomposition, if present, and passes to the small intestine, where it is broken up into creosote and carbonic acid gas, is slowly absorbed and eliminated principally by the lungs.

It is reasonable to presume that it exerts a direct inhibitory influence upon the bacteria in the blood current, and the foci in the lung for the reason that there soon follows a gradual reduction in temperature, a conspicuous absence of the signs of the severe toxemia, and the case usu-



ally terminates by lysis and not by crisis; or, if crisis be present at all, by a less abrupt and less severe type. This fact is an argument in its favor that it does limit the activity of the infection, thus making it unnecessary for the vital forces to manufacture the quantity of antitoxin which, in the absence of such influences, would ordinarily be required.

Creosote carbonate can be taken pure, and followed by a little milk or wine, but is best given in emulsion; the average adult dose is 15 m. every three hours, but this quantity may be doubled without any unpleasant effect. There is one condition sometimes produced as a result of creosote carbonate, which, in the minds of many physicians, renders its use objectionable, namely, smoky urine; this is not a contra-indication, and is of no significance, except in the aged.

Nephritis is rare, while a concentrated, reduced urine showing the presence of albumen, is common, consequently, I think it advisable to employ some mild diuretic while such a condition exists; I usually choose *spts. mendererus*.

If you desire to gain the immediate gratitude of the patient, your first endeavors should be directed toward the relief of the distressing pleuritic pain; this usually yields to mustard poultice; some prefer the ice bag, claiming for it the advantage of being more cleanly, and at the same time helping, in a measure, to reduce temperature; yet, intercostalneuritis may result from its too persistent use. Patients usually complain less of heat than cold, and the results are usually more rapid and satisfactory. When the poul-

tice is removed, the chest should be enveloped in a neat fitting cotton and oil silk jacket. Should the pain persist, resort may be had to the Panquelin cautery, adhesive straps, or the hypodermic injection of heroin hydrochlorate,  $\frac{1}{8}$  gr., repeated when necessary.

Opium and its alkaloids, should be avoided, if possible, for it is not unlikely that the influence it exerts by interfering with elimination may be harmful, should the case become critical; this is particularly true in aged and feeble patients; yet, if the pain resists the ordinary measures, and the patient suffers also from the want of sleep, then heroin, or even morphia, may be considered the lesser of two evils.

For the intense headache, frequently met with during the initial stage, an icebag applied to the head is usually sufficient.

We are to remember that temperature ranging upward to 104 degrees F., and even 105, is to be expected, and by many, is regarded with favor, as an index to the patient's resistance. Yet, such temperatures are harmful, if allowed to continue for any considerable length of time, and in such an event are best controlled by systematic sponging with cold water. This should be cautiously applied, allowing only one portion of the patient's body to be exposed at one time.

At no time are cold baths permissible.

Under circumstances which render cold sponging especially difficult, one or two moderate doses of phenacetin are not objectionable, while the continued use of any of



the coal-tar antipyretics, is certainly harmful.

To meet the emergency of threatened heart failure, in the words of Osler, "Now, the judgment and resources of the physician are taxed to the utmost." We are taught that heart failure may occur in two ways: one, as a result of the resistance met with by the right ventricle on account of the mechanical obstruction in the lung; evidenced by increasing cyanosis, increasing shortness of breath, signs of edematous infiltration in the lungs and a small and feeble radial pulse. At such a time venesection is clearly indicated, and the withdrawal of from eight to sixteen ounces of blood (to be repeated, if necessary) is usually followed by improvement. Strychnia nitrate should be administered hypodermically in doses of 1-20th to 1-40th grain, every two to six hours, as required.

The second cause of heart failure is due to a direct poisoning of the heart muscle, owing to the intensity of the toxemia. This is evidenced by increasing pallor, marked general prostration, muttering deliri-

um, irregularity of breathing, subsultus, cold extremities, small, feeble and very rapid pulse. Under such conditions strychn. nitrate is again indicated, as is camphor suspended in sweet almond oil; also, the hypodermic use of caffeine, and ether, the former being a splendid cardiac tonic, while the latter is a rapidly diffusible stimulant.

It is in this class of cases that Nothnagel strongly advises the use of quinine muriate, hypodermically, 7½ grs. being the usual dose, a single injection being usually sufficient, rarely more than two.

Alcoholic stimulants at this time are decidedly beneficial; but their routine administration in the early stages of the disease is not only unnecessary, but harmful (except in confirmed alcoholics and the aged). The idea that its early employment tends to obviate cardiac embarrassment later, I believe to be erroneous.

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## PRELIMINARY REPORT OF A CASE OF SO-CALLED FOETAL ICHTHYOSIS\*.

By BERNARD W. MOORE, M. D., and LOUIS WARFIELD, M. D., St. Louis.

(From the Bethesda Maternity and Bethesda Pathological Laboratory, Dr. E. W. Saunders, Superintendent.)

The remarkable disease which is commonly known in English medical literature as foetal ichthyosis, is so striking and uniform in its manifestations, that no description is necessary in connection with the report of a case. The disease, which probably develops in the third or fourth month of intrauterine life, is characterized by the occurrence over the whole surface of the body of thick epidermic plates of various sizes, separated by fissures and furrows, and by certain deformities of the eyes, ears, nose, mouth and extremities.

The etiology of this affection is unknown. Heredity apparently plays no part in its production. The absence of syphilis in the parents is generally shown in the recorded cases. The parents, indeed, in most of the cases have been healthy and strong. The one striking fact in this connection is that a woman who bears one ichthyotic child frequently bears another.

As to the nature of the disease, several theories have been advanced. The older writers regarded it as a monstrosity. Sir James Y. Simpson was the first to emphasize the view that it is a true ichthyosis. Later Hebra combatted this idea,

and propounded the theory that it is a general seborrhoea. More recently Unna has classed it among the stagnatory tumors, due to a progressive disturbance of nutrition. Numerous writers have taken up these various contentions, and the matter is still to be regarded as *res non judicata* in dermatological pathology.

The mode of origin of the morbid process has been variously explained. Some of these ideas may be briefly mentioned. For instance, Loecherer suggested that the thickening of the skin is due to an excessive formation of sebum and epidermis, hindering exfoliation of the stratum corneum. Carbone believed there was excessive activity of the rete Malpighii. Barkow regarded it as occurring in two stages; the first characterized by the formation of bullæ, which burst, the tears forming the furrows seen later; the second, by hypertrophy of the papillae and thickening of the unbroken portions of the skin. Leloir regarded it as a trophoneurosis of the skin; Kyber, as a neoplasm; and Bowen as due to the persistence and adherence of the epitrichial layer.

It is a remarkable fact that there is no record of an ichthyotic foetus

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having been born before the seventh month. At the same time, many of the recorded cases were born prematurely, and while fairly vigorous at birth, rapidly succumbed in a few hours, or days.

That the disease is rare is shown by the fact that Riecke in 1902 was able to collect but 52 cases, to which some three or four may now be added.

The following case is of interest, in that it supplies certain deficiencies which have hitherto existed in the study of the disease, and presents certain conditions, which, when more fully worked out later, will, it is believed, prove of interest.

Mrs. C. (case No. 947), age 28, nativity, Illinois, entered the Bethesda Maternity Aug. 10, 1905. The patient was an average sized woman, with red hair and a fair, freckled skin. The examination of the viscera was entirely negative. The pelvic measurements were normal. The skin was normal, except for the lentigo.

Her mother, four brothers and two sisters are living and in good health. The sisters are married, and have all borne healthy children. The father died at the age of 50 of pneumonia, after a brief illness. Two sisters died of small pox in childhood. She has no further knowledge of her family history, except that her people have lived in the country, and have been long-lived, hardy and free from skin disease. She does not know of any consanguineous marriages in her family. She is not related by blood to her husband, who, she says, is a healthy man and of a healthy family.

Her personal history is negative,

except an attack of typhoid fever in early childhood. Her menstrual life began at age 13. Menstruation was regular, painless, lasting four days, and of the 28-day type. Six years ago she became pregnant. The pregnancy was normal, but ended prematurely at the seventh month. At that time she lived in Oklahoma, and was attended by a negro midwife, who would not permit her to see the child, but buried it at once. She received the impression that there was "something wrong with the child," although the midwife refused to tell her about it.

The last menstruation was December 10-13, 1904. She suffered no discomfort during the pregnancy. Life was felt in May. During the night of August 9, the membranes ruptured, and the following day she entered the Maternity after a railway journey of forty miles, during which time the liquor amnii escaped freely. Pains began at 8 p. m., August 10th. The child presented by the breech. S. L. A., foetal pulse 140 and strong. The diagnosis of the foetal condition was made by touch. At 7:30 p. m., August 11th, the child was born. The placenta came away spontaneously a few minutes later. The placenta was intact and normal in appearance. The maternal surface was smooth and of normal color. The cotyledons were well marked, and no infarcts were noted. It was quite friable. Teased villi appeared normal under the microscope. Nothing abnormal was noted about the membranes and cord.

The child, a male, cried vigorously at birth, and presented a hideous and repulsive sight. It looked as



though it had outgrown its skin and burst through it. The whole surface of the body was covered by irregularly shaped plates of thickened-epidermis, from 2 to 4 mm. thick, of an ivory color, separated by furrows of a dark red or purplish hue. The largest plates were seen on the back, the furrows there running for the most part circularly. Over the front of the trunk, the plates were smaller, and the furrows more irregular in direction. About the joints, the furrows were as a rule circular, and more longitudinal along the course of the limbs. In places about the joints, where they were deepest, the fissures were bleeding. The greatest thickening of the skin occurred about the head, especially over the forehead, producing marked ectropion of the upper eye-lid. The mouth was held permanently widely open by the thickened skin. The nose was rudimentary, showing two orifices in the slight elevation which represented it. There was but a slight attempt at the formation of the ears, which were crossed on either side by deep furrow. The mucous membrane of the mouth and tongue appeared normal. The glans penis was uncovered, although the skin of the penis and about the rectum was thickened. The hands and feet were distorted, the skin being drawn tightly over the bones. The fingers and toes were flexed and rudimentary. The feet showed slight talipes varus. No vernix caseosa was found on the body. The weight was 2220 grms., length 49 cm.

The child cried almost continuously until its death at 6:30 p. m., Aug. 15th. During this time it

took water and breast-milk eagerly from a dropper, suction being impossible owing to the condition of the labium. All bodily functions were properly performed, up to the time of death. The skin was cold and clammy throughout, and the temperature subnormal. Before death a peculiar, offensive odor about the child was noted.

An autopsy was performed about eighteen hours after death. The portions of skin that had been ivory white were dull brownish. The fissures were bluish and reddish black. The skin was as tough as leather. All the organs were congested. No pneumonia or macroscopic evidences of atelectasis were noted. The thyroid and thymus were both small. The other viscera showed no marked macroscopic change.

Portions of all the tissues, including various parts of the skin, were hardened in formalin. No changes worthy of note were found in the liver, spleen, kidney, adrenal, lung, muscle and aorta. There was marked atrophy of the thymus gland, with calcification of Hassall's corpuscles. The changes in the thyroid were rather remarkable. They consisted in an enormous increase in the connective tissue of the gland, and an almost complete lack of colloid material and alveolar formation. Wherever it was apparent that alveoli probably had been, there were columnar cells lining the alveolus, and the centre of the alveolus was occupied by granular material, degenerated cells, both cells with deeply staining nuclei, and those, larger, with vesicular oval nuclei. At no place did it resemble the normal gland.

In sections of the skin, the chief change is the enormous thickening of the horny layer. The rete Malpighii appears to be thinned. The transition from the outer cells of this layer to the horny layer is abrupt. The horny layer is lamellated, and on the scalp, where it is thickest, it occurs in whorls surrounding the follicles, where here and there hairs are seen in cross section. The sebaceous and sweat glands seem about normal. The horny process does not extend to the cells of the glands. The blood-vessels are much congested. The mucous membrane of the mouth and lips is quite normal, and the transition from it to skin is sudden and striking. Sections of the placenta and cord show nothing abnormal. The process of senility, as shown in the endarteritis of the blood-vessels and small infarcts, is just as far advanced as in the pla-

centa and cord of a full-term child. It is possible that this may have had an influence in bringing on premature labor.

In the cases hitherto reported, a complete microscopic examination of the foetal adnexa has been wanting. In this respect the present report supplies a deficiency. In only two of the recorded cases has the thyroid gland been specifically mentioned: in Winfield's case, where it was totally absent, and in Daniel and Cordes' case, where it was found normal. Winfield was the first to suggest a possible relationship between the skin lesions and a deficiency in the thyroid secretion. The present case furnishes, at least, ground for interesting speculation in this connection, and reason for a careful study of the thyroid in cases which may be studied in the future.

## EIGHT SELECTED CASES, REPRESENTING TWO PHASES OF GALL-STONE DISEASE.\*

BY WILLARD BARTLETT, M. D., St. Louis.

In presenting this paper on the ever interesting pathologic condition at hand, I shall confine myself to the following two distinct divisions of the subject.

1. A consideration of those cases which are never diagnosed, and the evidence of gall-stone disease found during the course of an operation for some other cause.

2. A discussion of those patients who suffer from obstruction of the common duct.

It seems to me there is an especial reason why these two subjects should be considered in the same paper. They represent the two extremes of our experience in this line of work. The first named, as might be supposed, is a class of patients who present the mildest kind of symptoms, which we see at all in this malady, whereas, the second class is composed of those who are the greatest sufferers, and among whom the mortality is the highest, whether they are operated upon or not.

The especial reason why it seems well to consider these two sorts of patients at the same time is, to bring out the necessity of preventing the mildest form of this pathologic condition from ever assuming its most serious aspect, viz., common duct

obstruction.

We need no argument to convince us of the possibility of this dire accident complicating any case. We are all convinced that far the greater per cent. of all gall-stones are formed, originally, in the gall bladder, and that in any case, some of these may find a lodgment in the duct and thus produce a sudden menace to the health and life of the individual. However, it is not my purpose to discuss, in general, the pathology of gall-stone disease, or the genesis of gall-stones themselves. Hence I will go no further into this branch of the subject.

Before considering the histories of four cases, selected from my practice, in which gall-stones were found accidentally, while operating upon another well defined pathologic lesion, it may be well to call to mind the chief points of diagnostic interest in this connection.

These omissions, I am free to confess, can be prevented in practically every instance, not only by the many others who are constantly making the same mistake, but by myself as well, if only a proper history of each case is elicited.

These people will be found to have had digestive disturbances earlier in life, at some time to have been

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\* Read before the St. Louis Medical Society, January 13, 1906.



more or less sore in the upper right abdomen, will probably have had attacks of colic at some time, although these may have been so mild as not to have attracted much attention, and many of them will have had typhoid fever, or other intestinal disturbances. •

In other words, a keen observer should in all of these cases, if he has elicited the proper kind of a history, had his attention directed to the possibility, at least, of latent gall-stone disease. •

The matter, which you will find in all the older works on general pathology, referring to gall-stones found at autopsy in patients who never presented any symptoms, is one of the absurdities which has come down to us from the time when nobody had gall-stones, who was not jaundiced.

Now for a brief history of four illustrative cases.

1. Mrs. B., 42 years of age, the mother of ten children, was operated upon April 20, 1905. She presented a history of sixteen years' abdominal trouble, colicky in character. She was an immensely fleshy woman, and was so sensitive that she could not bear any sort of physical examination of the iliac region, which was at all satisfactory. Her history was so plainly indicative of appendix disease, that the McBurney incision was made, and a very long partially adherent appendix, presenting alternate constrictions and dilations, removed. Evidently the diagnosis, so far, was correct, and she would have been sewn up without more ado, had I not followed my usual custom of running the hand up under the liver, where-

upon I discovered that the gall-bladder was contracted around a large stone. Through a small incision over it, I found the cystic duct obliterated, divided it and removed the bladder intact, containing the stone. The patient made an uninterrupted recovery, and went home well.

2. Mrs. J., 34 years of age, was operated upon Sept. 27. Her symptoms, which had persisted for three years, were distinctly pelvic in character, and a bi-manual examination revealed a mass on either side of the uterus. These manifestations completely overshadowed everything else. The abdomen was opened, a large hydro-salpinx removed from the right side, an ovarian cyst, the size of an orange, taken from the left side and an adherent appendix amputated. Then thanks to the above mentioned invariable rule, when a woman's abdomen is open, the hand was thrust up under the liver, and a small gall bladder felt with a stone inside. Through a very small incision, over the gall bladder, it was removed, containing a beautiful, pure cholesterin stone. The whole procedure took less than an hour, the patient was up two weeks later, and is now as well as she ever was in her life.

3. Mrs. K., 45 years of age, was operated upon Sept. 9th, and a partial resection of the stomach for chronic ulcer was made. Following this the stomach symptoms were perfectly relieved. She could eat anything, digest it perfectly, which she had been unable to do before; but a very annoying feature of her condition had in nowise been influenced by the operation. I refer to severe paroxysms of colicky

pain in the upper right abdomen. We had noticed a few adhesions around the cystic duct when her abdomen was opened, but having on hand a task of such magnitude, we did not consider it advisable to waste any time on other organs, after resecting the stomach. However, these painful attacks became so severe, that we were compelled to re-operate, and on Sept. 30th removed a greatly distended gall bladder with a cystic duct, containing one tiny stone, and its lumen reduced to about the size of an ordinary pinhead. At the same time the appendix was removed. From this date the patient made a perfectly satisfactory recovery. I saw her a few days ago, looking perfectly well, having gained about twenty pounds in weight, and expressing herself as being entirely free from pain.

4. Mrs. A., 60 years of age, was operated upon Oct. 21st for a total prolapse. This was corrected by ventrofixation and perineorrhaphy. While the abdomen was open, I discovered a contracted gall bladder. On account of the patient's age, I refrained from further work, for the time being, but on Oct. 30th removed the gall bladder and on Nov. 9th the patient went home perfectly well.

These four cases will serve to illustrate the point at issue, namely, that such lesions are being constantly overlooked, not only in patients whose abdomens are opened for some other cause, but also in a vast number of people whose abdomens are not opened at all, but should be

for this same gall-stone disease.

These illustrations serve further to show the value of making a systematic examination, of as much as possible within the abdominal cavity, whenever it is opened, and no contra-indication such as the presence of free pus is found.

While describing four cases, which illustrate obstruction of the common duct, I am to be pardoned a word on the diagnosis of this condition.

1. A patient, Mrs. W., 60 years old, who entered the hospital last Monday and was operated upon only this morning, illustrates the matter better than could be done by any amount of theoretical discussion.

To put it very simply, she is the mother of a number of children, and has had digestive disturbances for twenty years. Has had four attacks of colic in the upper right abdomen during the last three years, these being so severe as to put her to bed and require morphine. The last one came on Thanksgiving Day, since which time she has been intensely icteric, has had chills, very high temperature, much bile in the urine and is so troubled by itching, that she can hardly restrain herself from tearing at the skin constantly. I can hardly imagine a better picture of the diagnosis of stone in the common duct, although I will admit that there are instances where jaundice has not been present. I removed two stones from her common duct and 38 similar ones from the contracted gall-bladder.\*

2. Mrs. S., 32 years of age, was operated upon Nov. 4, 1901. When

\*Mrs. W. was up on the 6th day, her fistula closed at the end of three weeks; she went home well a few days later.



first seen she was doubled up with gall-stone colic, was extremely icteric and had a temperature running from 103 to 104 degrees. She had been a sufferer for years, was considerably emaciated, and was altogether in such a deplorable state, that I feared for the consequences of an operation. However, it was very clear that she was rapidly losing ground, so the abdomen was opened, the gall bladder, which was considerably distended, was drained and found to contain no stone, then attached to the parietal peritoneum, and the patient hastily put to bed. Apparently the gall bladder had emptied itself of the stone, which was completely obstructing the common duct, and though I was aware of this fact, I did not dare hazard the patient's life, in her present condition, by attempting more than a temporary relief of the urgent symptoms. As soon as she awoke from the anesthetic, she was seen to be completely relieved, and naturally made a speedy recovery. Of course, the fistula persisted, as might have been expected. About three months later, as the lady was starting out to spend the evening at the theatre, she suddenly dropped to the floor with a violent attack of pain, which persisted for a short time, after which bile appeared, for the first time in the stool, and the fistula at once closed. Of course, she passed her obstructing stone and in the five years which have intervened, she has had absolutely no further trouble. I saw her less than a week ago, and can vouch for the fact, that she is perfectly well.

3. Mrs. J., 53 years of age, was oper-

ated upon Aug. 26, 1905. For many years she had had stomach trouble. Two years ago she became jaundiced with colicky attacks, which came on every few weeks and lasted several days. She had every one of the classical features of a stone in the common duct. At the operation the gall bladder was found shrunk to the size of the thumb, and containing several small stones. The common duct was distended to the size of my index finger, and its walls were very thick. It was incised and a stone felt in the lower end. While manipulating this, with a view to bringing it up into the opening, it suddenly slipped down into the intestine, and the desired result was thus accomplished, although not exactly in the manner intended. The gall bladder had no connection with the cystic duct, hence it was removed; a tube was tied in the opening of the common duct, and the patient made a rapid and uneventful recovery. At first there was a little digestion of the skin around the fistula, showing the admixture of pancreatic fluid. At the end of three weeks, the fistula had closed and one week later, the patient went home. A short time ago I heard from her and she was perfectly well.

4. Mr. H., 69 years of age, was operated upon Sept. 11th. He presented very much the same chronic history, of digestive trouble, with later severe colics, and recent icterus, as those evinced by the other three patients, whose histories have just preceded this one.

The night before the operation he had a temperature of 105, and went on the table an exceedingly sick



man. We had kept him in the hospital about ten days, hoping that his condition would become favorable enough to allow operation, but instead of this, he gradually went down hill, and at his age, we were afraid to wait any longer, so upon the above mentioned date, knowing full well the danger of operating but preferring to kill him, rather than to let him die, without giving him this single chance for recovery, the abdomen was opened and a shrunken gall bladder found with an immensely dilated common duct, as was expected. His condition was so alarming while on the table, that nothing further was attempted than a mere cleaning out and drainage of the gall bladder. We put him back to bed with the full knowledge that a secondary operation would be necessary, but to our surprise, simple drainage was so efficacious that the edema around the stone in the duct subsided enough to let bile pass by, and his fistula closed in three weeks. About a month later he was at work in his store, and although now seventy years of age, and carrying a stone in the common duct, which will have to come out in all probability, he is to all intents and purposes, a hale and hearty old gentleman.

These four cases last described will serve very well, I think, to illustrate this most serious phase of gall-stone disease. All of these patients might have been saved the great danger to which they were exposed, to say nothing of the years of treatment and torment which they endured, if only an earlier diagnosis had been made, while their stones were confined to the gall bladder,

where a very simple surgical operation would have sufficed, instead of the extensive procedure, which is necessary after a stone has lodged in the common duct; to say nothing of the patient's unfavorable condition, at such a time.

It may be in order to say a word on the surgical treatment of gall-stone disease, and I will preface this by stating most emphatically that it is no longer considered good practice to operate in two sittings.

I have, very recently, had an opportunity of observing the surgery of our seven most progressive clinics in America and will state that I nowhere saw this done. By this method it is impossible to adequately examine the interior of the gall bladder and the ducts. In the second place it does not immediately relieve the status for which it is done, and in the third place, the anatomical condition, which is left behind, after a gall bladder has been sown to the skin, is in many instances productive of worse symptoms, than those which were occasioned by the original disease.

An operation, properly undertaken in a case where there is no obstruction of the common duct, must contemplate one of two things; drainage of the gall bladder, or its removal. It must be kept in mind that drainage is the thing of paramount importance in gall-stone disease, and certainly is this true, if there be any serious amount of infection in the biliary passages especially those of the liver. Probably a gall bladder should not be removed, as long as it contains bile, if its walls be not diseased. However, there is so much difference of opin-

ion upon this point, that it cannot be regarded as settled. Personally, in non-obstructive cases, I remove every gall bladder, the walls of which are thickened or shrunken, but I hesitate to remove the non-diseased, unless I am reasonably sure that the cystic duct is obliterated. We know that gall-stones almost never recur in a gall bladder, which has been thoroughly cleaned out. W. J. Mayo told me of one in his 1200 cases.

Now, as to the obstructive cases, I mean those where there is a stone in the common duct. Here the treatment is quite another matter, and I believe that it is radically wrong to remove a gall bladder in such an instance, which can possibly be used for drainage; I mean by this, only one into which bile flows, or may flow later, and I have seen it take a week for this to become apparent. But, the point of greater importance is, the thorough exploration of such a common duct, which can only be accomplished in about two-thirds of its length, *after* it has been cut open and the operator's finger introduced into it. Unless this has been done, nothing reliable can be stated in regard to such a duct, and the patient has been denied, practically, his only chance of permanent recovery. But, even after such a duct has been evacuated, still secondary stricture of it may occur, hence the gall bladder must be left for future drainage, which may become necessary, and furnish the patient with his only means of eliminating bile. In these cases, I am careful to follow the technic proposed by Wm. J. Mayo, which consists in leaving the duct practically open, with a fish-tail

drain tied in it. This allows the bile to flow down into the gut, as well as out the drain, thus preventing particles of food from finding their way upward into the peritoneal cavity.

The best way to drain a gall bladder is by tying in it a rubber tube, wrapped with gauze and thin rubber. This can be made water-tight and thus is obviated the necessity of attaching the bladder to the parietics, with its undesirable consequences.

It seems to me there is no pathologic condition which makes more urgent demands upon the surgeon, and requires better surgery than does this matter of gall-stone disease.

As soon as the abdomen is opened, there must be an immediate decision as to which one of several lines of treatment is to be pursued; something possible only to one of wide experience in this disease: nor is this the only requirement. I know of no more difficult technical problem, than the rapid and safe treatment of these rather minute viscera, after widespread pathologic changes have taken place.

As a final plea for advancement in this line of surgery, it is certainly not too much to beg that my first class of cases, which have been overlooked altogether in the past, may not in the future be allowed to attain the gravity of my second class, those in which the common duct is obstructed.

#### DISCUSSION.

Dr. Jesse S. Myer said that as a medical man he is as reluctant to yield ground to the surgeon as medi-



cal men usually are, but he had come to consider gall-stones strictly a surgical disease. After the diagnosis of gall-stones is made the case should be turned over to the surgeon. He had seen a large number of cases of gall-stone disease that had been persistently treated by physicians on account of the stomach trouble and these patients were only relieved after gall-stones were removed. He did not agree with Dr. Bartlett as to the ease of the diagnosis in these cases. He had seen cases in which the symptoms were strictly gastric, no pain in the right hypochondriac region and nothing to lead to the diagnosis of gall-stones but the persistent gastric symptoms that did not yield to treatment. When one meets with a case of stomach trouble in a person forty to fifty years of age and can find no reason for the existence of the symptoms either in a disturbance of the secretions or the motility of the stomach, gall-stones should at least be suspected. In the diagnosis too great weight is apt to be given to jaundice. As to the reformation of gall-stones, the etiological factors which produced the first batch of stones might produce a second batch. Among the etiological factors may be mentioned disturbance in the intestinal tract, especially ulcerations, as in typhoid fever, or relaxation of the abdominal walls leading to a stagnation of bile, etc. Cushing had reported a case where typhoid germs were found in the gall bladder years after an attack of typhoid fever and typhoid bacilli were found in the gall bladder. In making the diagnosis then, there should always be taken into

consideration the previous history, especially with reference to typhoid fever. About 90 per cent. of the cases occurred in women and a majority of the other 10 per cent. in old men who had at one time been fleshy, and in whom there existed this condition of relaxation of the abdominal walls. For the proper flow of the bile there must be a counter pressure with each respiratory movement, hence any disease that would lead to muscular relaxation would result in a stagnation of bile, which in turn may result in a cholecystitis, leading to the formation of gall-stones. The cholesterin stone presented by Dr. Bartlett was probably two-thirds cholesterin, while the brown portion was probably bilirubin.

Dr. V. P. Blair called attention to one symptom, namely the cramp that followed the taking of a small amount of food, that cramp being relieved some time afterward with the passage of gas. He had, however, seen the same symptom in a case of pyloric obstruction. He also directed attention to a useful surgical expedient practiced where there was a doubt between gall bladder disease and appendicitis in women who had borne children and who had loose abdominal walls. A small window admitting two fingers could be made at a point corresponding to the site of the appendix and through this incision, owing to the mobility of the abdominal walls, the appendix and the gall bladder could both be examined.

Dr. Bartlett, in closing, thought that what he had said about the diagnosis had been universally misunderstood, except as to the ease of



diagnosing stones in the common duct in the presence of the classical symptoms. Keeping in mind those facts, it was a simple matter to make the diagnosis; but the diagnosis of gall-stone disease in the abstract was not a simple thing by any

means. He agreed with Dr. Brown that it would be very bad practice to make such an examination for stones in every case; he had simply had reference to those cases in which it was feasible.

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## USE AND ABUSE OF MASSAGE IN THE TREATMENT OF RHEUMATISM.\*

By T. N. BOGART, M. D., Excelsior Springs, Mo.

In the application of massage in the treatment of rheumatism, I wish to say it is not my purpose to condemn the manipulator of the masseur, for we recognize scientific massage as one of the best treatments of rheumatism when followed out properly and at the proper time.

Massage, or systematic rubbing and manipulation of the tissues of the body, is one of the oldest means employed in the treatment of disease, dating back as far as 3000 years B. C., and was used by the Chinese of that date. This art has been used by all nations more or less from that date down to the present time for treatment of disease, associated with more or less medical treatment; but however at the present age from some unknown cause it has been singled out as a science of its own, and is applied in the treatment of all diseases, regardless of the science of medicine. We now have schools that teach this one art as a science, and use it in every form of disease, and at the same time con-

demn all other forms of treatment. It especially lays stress on the fact that it is a specific in the treatment of rheumatism; I am frank to say that I use massage myself in the treatment of some of my cases, but don't use it at the expense of everything else; for I recognize and believe massage to be only one remedy to be employed in the treatment of disease, and that it occupies a place in the treatment of rheumatism as does the salicylates and it is an art belonging to the practice of medicine, no more able to stand alone when divorced from anti-rheumatic remedies than quinine, electricity in its different forms, or bathing, if tried by themselves and alone. The science of medicine is too broad and deep for us to pick up any one remedy and rely on it as a specific for any one disease. Imagine if you will, a doctor going through life clothed in the mantle of a medical man with only one idea, and that of massage; pushing it through the world as a King Cure-All, a science

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\*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

by itself, independent of everything else; such a thing is too narrow for the medical profession. Rheumatism with all of its complications is entitled to more consideration than the one-remedy treatment, for at the best it resists treatment more strongly than any other disease I know of, from the fact that the causes for its existence are so variable, and the fact it is to be cured by using remedies and means for the purpose of ridding the system of the poison by elimination, would discredit the theory that it can be cured by massage alone.

Rheumatism in its early stages should never be treated by massage, for three reasons: First, the manipulations have a direct tendency to increase the hyperemia and inflammation in the affected parts; second, massage will elevate the temperature and increase the liability to organic heart trouble, which often follows even the mildest rheumatic cases; this point should always be guarded by medical means; third, pain, which is always an aggravating factor, is not only increased by manipulation, even by the most scientific masseur, but the patient is left in a weakened condition and the liability of an attack of rheumatic fever is greatly increased, which is always the foundation for the so-called rheumatic heart. Now if you have a localized affection of say, one joint, where there is a tendency to stiffness or ankylosis, massage of a light stimulating character can be given, at the same time exercising great care not to increase the pain or set up additional inflammation, but to increase the blood supply to the parts to such a degree as to ar-

rest adhesions of the tissues in this particular locality, your massage is useful, but if too violent it is always a detriment, even in this form of cases.

In cases of chronic rheumatism of a traumatic or uric-acid character where there is ankylosis associated with adhesions of the tissues, massage if given properly, is always beneficial, as it seems to set up a slight localized inflammatory condition which promotes absorption of the adhesions, especially those involving the soft structures. Then if passive motion is employed at regular intervals the joint will always improve; but even this form of massage can and is often abused by being given too often and too violent.

No one is competent to treat any case of rheumatism until expert enough in diagnosis to recognize the difference between rheumatism, tuberculous joints, and septic neuritis.

Gonorrheal rheumatism is one of the most obstinate forms of this disease, yet the massage treatment is often given promiscuously in these cases until the patient rebels and refuses to take it longer; they should never be treated by massage on account of the acuteness of pain at different stages of the disease, and the susceptibility of relapse if manipulations are too violent. I find this form of cases yield very slowly even to the very best form of medical treatment together with the hot baths and every other form of palliative means; yet the masseur persists in giving massage to this class of cases until the patient is absolutely so sore and stiff that he can not get

on the table; he has been led to believe by the manipulator that it is necessary to arouse all of this pain and soreness before convalescence can begin to establish itself.

A patient is often led to believe he is being relieved of rheumatism, especially just after taking a massage, on account of his being able to move about more freely just after treatment; this is the case with most patients as the manipulations seem to relieve the stiffness for a short time; especially is this true in rheumatic lumbago. But the belief is only temporary as the pain returns as bad as before, associated with increased stiffness and soreness, which add fuel to the fire by increasing the flow of blood to an already inflamed area. Very often injury is done to the kidneys on account of their susceptibility to inflammation especially when there is a rheumatic condition existing, no matter what may have been the cause of the rheumatism.

My experience with the masseur and his methods of treatment, has led me to believe not only that he often does great harm by manipulation in the different forms of rheumatism, but I find him to be a very poor diagnostician; for no matter what the disease may be, the massage treatment is always given if the patient will stand for it.

I believe that massage is useful in the treatment of rheumatism, and that it will always find strong advocates among the rank and file of the medical profession in the treatment of various forms of disease; but still I think more good could be accomplished if a correct diagnosis was always made and the treatment given under the direction of a competent physician.

## DISCUSSION.

Dr. John D. Seba. Bland: Rheumatism is always very interesting, especially to those of us who are drawing a pension on account of it and some of the rest of us might be willing to have a little rheumatism if that would carry with it a pension. Its etiology is always interesting. The majority of diseases we have to catch, but we don't have to catch this, we breed it in ourselves. First, there is the uric acid diathesis, and there is the absorption from the alimentary tract of toxins producing both muscular and inflammatory rheumatism. If those cases of inflammatory rheumatism are not handled with care and enthusiasm, the patients are likely to go to an early grave. We hear a good deal about the limitation of rest and the question of massage and when and how it should be performed. As long as you have a swollen and inflamed joint be careful how you handle it. After the acute inflammatory symptoms have passed massage is the thing.

Dr. Bogart, in closing: It was not my intention when I wrote this paper to give publicity to any art or science; but here in Excelsior Springs we have every kind of "ism" that can be represented for the treatment of disease; especially the masseur, manipulator or osteopath, they are all clamoring to treat the sick; hence it was my intention to give the impression that you could get just as good service from the masseur, and even better, than you could get from the osteopath; for the former will follow the instructions of the physician, while the latter will not.



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## EDITORIAL.

### OBSCENE NEWSPAPER ADVERTISEMENTS.

Some time ago the St. Louis Medical Society through attorney I. V. Barth had information issued for violation of Section 1447 of the revised statutes against "Drs." King, Meyer, Duff and Whittier, the causes being returnable on the 7th day of November, 1905, before Judge Daniel O. C. Tracy, of the First District Police Court. The cases being continued until November 17th, it was in the meantime agreed that the case against Drs. Meyers and Duff be continued generally and bide the result of the King case. Dr. Whittier did not care to accept the contingency of the King case's resulting adversely to his interests so he agreed in writing to advertise only within certain limits prescribed, in consideration for which his case was dismissed for want of prosecution.

Oral arguments were made and written briefs filed. Without entering into a detailed consideration of the legal features involved it may be said only that the defense rested entirely upon the contention that the ordinance was unconstitutional

and beyond the regulative powers of the municipal assembly. The advertisement was admitted to have come within the prohibition of the section and the case resolved itself into a question of law solely. On December 1st, Judge Tracy handed down a most able and exhaustive written opinion in which he held the ordinance constitutional and fined the defendant fifty dollars and costs. The defendant immediately took appeal to the Court of Criminal Correction wherein presides Judge Hiram Moore. On January 4th of this year an agreed statement of facts was here filed as in the Court below and on the 6th, following, oral arguments were made and briefs again submitted upon the points of law involved. The matter was taken under advisement and on January 27th judgment was again entered in favor of the City. Immediately after certain legal steps were taken, an appeal was perfected by the defendant to the Supreme Court of the State. Pending the appeal exhaustive briefs must be prepared by counsel and the matter be brought into proper shape for being presented in printed form to the Su-

preme Court. No case has thus far been found either in this or other jurisdictions precisely in point and there is, therefore, a rich field for legal speculation. It is to be hoped that the highest tribunal of our state will find the reason of the law in favor of the constitutionality of the ordinance in question.

It seems clear that by the terms of the ordinance not one line of this obscene advertising could be published without the publisher's being liable to a prosecution under the ordinance. The publisher is as culpable as is the physician who prostitutes his profession.

It may be said here, however, that the ordinance does not nor could it constitutionally prohibit all advertising by physicians or by those who offer cures for various ills. There is nothing which in any way prevents a doctor from advertising his specialty with the greatest eclat so long as he confines himself within the limitations of the ordinance. We may only enforce the law as we find it—but enforcement in this instance means at least a relief to a great extent.

With reference to the proposed proceedings for the ouster of medical companies engaged in the practice of medicine in this state from the exercise of their corporate franchises. It has become most common of late for irresponsible physicians and dentists, with or without licences, to organize in corporate form for the purpose of practicing medicine, surgery and dentistry. Here are perpetrated the vilest outrages which the medical profession knows. The evils of quackery reach their height in this corporate guise.

They use the corporation as a shield to protect them from the more stringent supervision of the state board of health and of the state dental board. These state boards may regulate the individual practitioner but they are powerless in dealing with the corporation as such. They may revoke the license of the single individual for unprofessional conduct but they cannot take away the license of a corporation. The franchise to be and act as a corporation is derived from the state and is not subject to revocation at the hands of any individual or set of individuals. Thus it happens that the corporation, a body which owes its very existence to the law, becomes in turn the most effective medium of these practitioners for the purpose of evading the law. But it is believed that the situation is one that may be reached through the courts. The purpose is to oust them from the exercise of corporate rights. If there is no authority in law by which they could obtain their franchise from the state, then the exercise of their corporate rights, *ipso facto*, becomes illegal. These companies, incorporated in many cases for the practice of medicine, surgery or dentistry, must derive their existence, if anywhere, from the article authorizing the incorporation of manufacturing and business companies. It will be contended against them that the practice of medicine, surgery or dentistry is in no sense a manufactory or business—certainly not within the meaning of that article of our statute. And even though within the meaning of the article, it would be yet far from conclusive that they could resist proceedings in view of

the fact that their corporate character is used to aid them in evading the laws adopted with reference to the state board, as indicated above.

There is a second class of such corporations, which seek an escape from what must be their inevitable contention, that the practice of medicine and surgery or dentistry is a business within the meaning of article 9 of the Revised Statutes of Missouri, 1899, by incorporating for the avowed purpose of owning, operating and controlling hospitals, sanitariums or retreats wherein they may care for and treat patients who may apply. Here there is involved an issue of facts whether or not in receiving the patients to their office rooms they are in reality conducting "hospitals, sanitariums or retreats."

Both classes may be reached by what are known as proceedings "quo warranto." These are brought in the name of the prosecuting official—in more important cases in the name of the Attorney General of the state—and have as their object the forfeiture of the corporate franchise. Such proceedings involving a revocation of a right solemnly granted by the state are necessarily of the highest importance and may be brought immediately in the Supreme Court. The Attorney General will not lend his name to the proceedings unless the best interests of the state demand it. To the end that the matter might be placed before our Attorney General or his department and the writ be caused to issue upon his information the society authorized Mr. Barth to go to Jefferson City and confer with the department. As a result of that conference, which was most satis-

factory, the JOURNAL is assured that it is safe to say that upon recommendations issued by the state board of health setting forth the present evils surrounding the practice of medicine and surgery in corporate form, proceedings in the name of the Attorney General could be promptly instituted. The records in the department of state at Jefferson City show a list of about a hundred and seventy-five medical corporations engaged in business in this state. Many of these, of course, are *bona fide*, yet a large percentage, upon a close examination of their articles of corporation, was found to fall within the classes referred to. Two and possibly three suits should be instituted in the Supreme Court. The quack has been allowed to flourish unmolested through the tolerance and indifference of the reputable physicians and the prosecutor.

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### THE CITY HOSPITAL.

At last the medical profession of St. Louis has been aroused to the necessity of changing the method of conducting the City Hospital. It is not the intention to criticise the superintendent nor his assistants either present or past, but to lay stress on the advisability of changing the method of administration which can only be changed by an amendment to the city charter. As before stated editorially in these columns, the institution should be under the jurisdiction of medical men appointed by trustees. The superintendent should be a layman who should be the executive head of the hospital. The directors or trustees of the hospital should appoint a



house surgeon, who would be an assistant to the superintendent; and a visiting staff consisting of surgeons, internists, gynecologists, neurologists, obstetricians, laryngologists, dermatologists, oculists, otologists, pediatricists, pathologists, and dentists, each for a period of six months or one year. The internes should be selected by competitive examination held by the visiting staff. This would secure for the pauper sick of our city the best medical treatment; for the undergraduate students the greatest possible advantage in clinical medicine; and for the medical profession the opportunity of dealing with a number of interesting cases which otherwise might escape notice. At the meeting of February 3rd the St. Louis Medical Society adopted the following in amendment of Section 5, Article XII, of the City Charter:

"Section 1. There is hereby created a hospital and out-patient department of the City of St. Louis, which shall be managed, directed and controlled, as provided by this charter and by the ordinances of the City of St. Louis, by a Board of Trustees, as hereinafter provided, whose members shall possess the same qualifications as the mayor, and shall give bond in such sum as may be ordained by the Assembly, with sufficient sureties for the faithful performance of duty.

Section 2. The control of said Board of Trustees shall be exercised over the City Hospital and Associated Dispensaries, the Female Hospital, the Quarantine Hospital, the Insane Asylum and the Poor House, as now existing, and be extended to branches that may from

time to time be established, or like institutions that may be created.

Section 3. Said Board of Trustees shall consist of six residents of the City of St. Louis of recognized capacity and fitness, together with the mayor, ex-officio. The members of said Board of Trustees shall be elected on a general ticket and by the qualified voters of the City of St. Louis. The terms of office of said trustees, so elected, shall be six years, except that those first elected shall be classified by lot, so that their terms shall expire two in two years, two in four years, and two in six years, respectively. All vacancies from any cause, shall be filled by the mayor until the next succeeding election. Said Trustees shall receive no pecuniary compensation or be interested directly or indirectly in the furnishing or performing of work, labor or services, materials or supplies of any kind to or for said hospitals, by contracts or otherwise. No Trustee shall hold any office of emolument under the city, state or national government, except the office of notary public.

Section 4. Any trustee may be removed by due legal procedure as prescribed by the city ordinances for removal of municipal officers upon proof of official misconduct or neglect of duty, or for mental or physical disability.

Section 5. Said Board of Trustees shall organize as soon as practicable after said trustees are elected. It shall biennially choose from its members, at a regular meeting to be held in the month of..... a president and other officers for the terms of two years. It shall select and employ a competent salaried sec-

retary. It shall establish rules and regulations for the administration and government of said institutions, subject to general and specific legislation. Said Board shall have the power to appoint and remove such superintendents, medical officers, subordinate officers, and other employees, as may be necessary for the efficient management and conduct of said institutions. The Board shall keep accurate and detailed accounts, in a form approved by the comptroller, of all moneys received and expended by it, detailing sources and purposes. It shall, during the month of..... in each year, transmit to the mayor a report of the condition of the institutions under its care and management.

Section 6. Said Board shall appoint a medical staff, representative, as far as feasible, of the several schools of medical practice, for each and every institution under its control. The staff shall consist of attending and consulting physicians and surgeons, who shall serve, as directed by the Board, without pecuniary compensation, and shall hold office so long as they shall perform their duties in a manner satisfactory to the said Board of Trustees. This medical staff shall be made up of residents of the City of St. Louis, members of the profession and of respectable character and of good standing and of recognized ability. They shall deliver clinical lectures and devise methods of bedside teaching. Vacancies occurring in said staff shall be filled by the said Board of Trustees.

The said medical staff shall be ad-

visory to the Board of Trustees in all matters pertaining to the fullest accomplishment of the humane purposes of the named institutions. All appointments for medical and surgical house-officers, of said institutions and out-patient departments, shall be made by the Board of Trustees only on nomination by the said medical staff, after competitive examinations conducted by said staff.

Section 7. Said Board shall annually, at a regular meeting in the month of ....., elect by ballot a superintendent for each of the named institutions. The duties of the superintendent shall be prescribed by the Board and shall be of a general administrative and executive but non-medical character."

It is believed every medical body in St. Louis will adopt the proposed amendments, and by the concerted effort of the medical profession there is little doubt but that the amendment will become a law.

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#### SOME OBSTETRICAL METHODS PRACTISED IN THE PHILIPPINES.

The popular belief that the child-bearing women of barbarous and semi-civilized peoples escape many of the pangs their civilized sisters undergo, would receive quite a setback were a careful investigation made. For a period of more than fourteen months, I was a resident of an island town in the province of Rizal, on the island of Luzon, Philippine Islands, and during that time had leisure to devote to the careful study of obstetrical methods in

vogue there. As a result of my observations there I was able to convince myself that the so-called ease and safety with which the semi-barbarous peoples of the Philippine Islands were supposed to pass through the period of labor could be replaced in reality by tortures and the process could be followed by serious and far-reaching consequences. From the start the crude, interesting methods resorted to during the confinement of a native woman furnished food for considerable reflection. No attention was paid to any sanitary conditions of the patient or of the surroundings. The patient, clad in the scanty garments worn by native women in the Philippine Islands, was placed upon a mat on the floor of the main room of the hut. The entire family, children, dogs, and those neighbors who could spare the time, ranged themselves, male and female, around the room in order to be present on this auspicious occasion. One slight tribute to the modesty of the woman in question was observed in the fact that her limbs were draped in her somewhat scanty garments. As soon as the first real pains manifested themselves and locomotion was somewhat impeded, the patient assumed the recumbent position, and a large broad piece of cotton or linen cloth was passed around the abdomen and the ends passed under the lumbar region and hips. These ends being seized by four persons, two at each end of the cloth, and the persons being seated on the ground, with their bare feet pressed firmly against the body of the patient, made strong traction on the cloth so as to tighten it over the abdomen, increasing the

pressure as required to assist the pains of expulsion. The bag of water if not already ruptured, very soon broke under this method of procedure and as soon as any portion of the child presented it was immediately seized by a fifth assistant and traction made, in a more or less vigorous manner, in order to draw it forth regardless of consequences. Should any delay, natural under the circumstances, be occasioned, further aid was given in a more forcible manner by placing a plank about six or eight feet long by a foot wide and of suitable thickness, transversely across the abdomen of the patient and upon this plank a native man or woman, mounted barefoot. Slowly, but with considerable force, this assistant then raised himself on his toes and allowed the heels to descend forcibly on the board. The process was repeated for a considerable time, the first four assistants meanwhile tugging manfully at the cloth around the lower portion of the body. This last auxilliary process, viz., the plank with its superimposed weight, was usually effectual except in breech presentations, in which case a crude attempt was made at version, the hands of the assistant performing this important service being seldom in a proper sanitary condition to recommend them for such work. Few cases in which these various methods were used were free from laceration of either cervix or perineum, or both; and in some cases noted there was sufficient violence employed to cause rupture of the uterus and fatal results. The birth of the child was followed by the expulsion of the



placenta by the above means, and, should the process be delayed, forcible traction on the umbilical cord was made to such an extent as to tear away portions of the placenta, and often large sections of this body were left to find their way from the uterine cavity of their own accord. Weeks and even months later the results of such practice were noticed in the septic conditions which would naturally follow retention of the membranes. After the birth of the child the umbilical cord was severed by a blow from the bolo, a knife like a machete, carried by nearly every native man in the interior of the islands, and the end nearest the child was knotted. This was further reduced in length after the mother had bathed both the child and herself in the nearby stream, or well, which ablution was usually performed within an hour after the birth, and the newly made mother then proceeded to take up her usual avocations, temporarily postponed by the above interesting event. Notwithstanding these crude and somewhat violent methods employed to hasten the birth of a child, some few women and their offspring managed to escape without serious injury, and some even went through their confinement without the resort to artificial means. As there were no records extant from which any data concerning these cases could be obtained, careful notes were taken in one hundred and five cases to which it was possible to obtain access, and the result showed somewhat startling facts. Three were cases of twins. In two of these the mothers were uninjured and the children were safely delivered. In the third

case, the woman was the daughter of the presidente or head man of the town; after one child had been delivered dead and with a broken arm, the presidente mercifully interfered and put a stop to the brutal methods employed and sought the aid of the medical officer on duty with the American forces in the town; through the efforts of this man the second child was safely delivered. Almost superhuman efforts were necessary to secure proper sanitary surrounding and to enforce antiseptic methods, in consequence of the modesty which native women seem to regard as necessary in their dealings with persons of another race. This added to the many difficulties a medical man meets when called to attend native women. It is seldom that a medical man is called upon in obstetrical cases until native methods have been used and the patient's condition has become so grave as to force even a Filipino to recognize the inutility of any further torture. Extensive laceration of both perineum and cervix was noted in thirty-eight cases where it was possible to secure the proper examination and six of these were further complicated by prolapsus uteri. Prolapsus uteri and inversion were noted in two cases which resulted fatally from hemorrhage and septicemia. In four cases toleration of the condition of inversion appeared to exist, and the uterus became reconciled to its new conditions, its position, and surroundings, and the patients, on an examination about twelve months later, had apparently recovered perfect health. Inversion in these four cases was the result of traction from below, exerted

in removing the placenta by forcible traction on the umbilical cord, and of the abdominal pressure from the plank with its superimposed weight. Metritis and endometritis existed in all of the thirty-eight cases examined. Five of these were traced directly to a gonorrhea, and two to venereal excess in newly married women, and which the rougher handling during the process of parturition aggravated. One case was of syphilitic origin. It may not be out of place to state that the venereal diseases met with in such great numbers in Manila and other seaport towns of the Philippine Islands are comparatively rare in island towns where communication with the outside world is difficult and infrequent. Much venereal trouble has followed in the wake of the Spanish, Filipino, and American armies which have traversed the islands, while isolated towns and villages have escaped. One case of an imperforate hymen was noted in a girl fifteen years of age, a native of a small mountain village about twelve miles from the town of Morong, Rizal Province, in which town I was stationed. The history of this case was as follows: the patient had never menstruated, though the native women frequently began as early as ten years of age; for more than two years every other month there had been intense pain over the left ovary and the uterus, lasting about four or five days; no flow was noted at any time, and during such paroxysms intense pain also existed over the bladder, accompanied by frequent micturition. This condition would cease for a period of nearly two months and then increase

again, the interval between the paroxysms being only marked by tenderness on pressure over the uterus and left ovary, and also by a noticeable increase in the size of the lower part of the abdomen. The girl was an unusually well developed and muscular one for her age and race, and was engaged in the usual agricultural pursuits of her family, which necessitated the carrying of heavy burdens on the head for long distances and hard manual labor. The attack, for which the attention of the medical man was required, was of greater violence than usual and overcome the prejudices of her family regarding medical attendance. She was brought on a litter from her home to the town and the medical man called upon to render her assistance in what the family fully believed to be a case of labor and for which the crude, interesting but ineffectual methods, (ineffectual in this case) mentioned above as being the usual method of procedure, had been resorted to. Examination of the patient showed great enlargement of the lower part of the abdomen, a largely distended bladder, enlarged and tender uterus, and the presentation of what resembled a bag of water. The patient emitted the characteristic cries of one in labor as the pains attacked her at brief intervals. Examination of the vagina, which was entirely filled with the protruding mass, showed it perfectly dry. The membrane covering the mass felt hard, tense, and resisting, and was only slightly moved by the pains. The muscles of the abdomen were bruised by the use of the plank and its weight and by the tight cloth that had been ap-



plied in the early stages by the native assistants. The catheter was passed and the urine drawn to the quantity of over sixteen ounces, and relief was almost instantaneous, but no difference was noted in the size of the mass projecting into the vagina. Within an hour, the pains having begun again with increased violence and the attack having lasted for more than five days prior to the patient being brought in to me for treatment, the urine was drawn the parts below were carefully prepared for operation, and an incision three inches in length was made in the membrane presenting. Immediately two quarts and four ounces of thick, offensive, menstrual blood was discharged through the orifice and the pains instantly subsided leaving only a slight abdominal tenderness. The membrane, through which the incision was made, was found to be an imperforate hymen nearly three-fifths of an inch in thickness over its entire surface, both in the center and at its attachment on the sides. For twenty-four hours a hot vaginal douche of a saline solution was administered every three hours, and on the second day, following the one on which the operation was performed the patient walked home. Repeated examinations made monthly showed no further trouble, and regular and painless menstruation followed. In the remaining seventeen cases displacement of the uterus was noted in nearly every case, and in all there was found on later examinations a chronic endometritis with all the accompaniments of leucorrhea, metrorrhagia, menorrhagia, dysmenorrhea, tendency to abortion, which

tendency was further aided in many cases by the use of certain herbs and even large needles in imitation of their so-called civilized white sisters. In a climate where all mucous membranes have a tendency to congestion it is not an unusual thing to find even the native women menstruating two or three times in the course of a month, while the white woman, a resident of the islands for any protracted period, will find her menstrual flow greatly increased in quantity, and the frequency also may be such as to call for the relief of bracing cold of a northern winter. Anemia, with its characteristic train of symptoms, is the leading symptom in the hemorrhagic type of endometritis, which there attacks native and white women alike. The life of the native Filipino woman is comparatively short, due to her many pregnancies, much manual labor, insufficient food, and most of all to the crude, brutal, and ignorant practices which bring to her a suffering equally as great as that borne by her white sister.

(Wm. Duffield Bell, Med. Rec., Jan. 27, 1906).

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### ERROR.

In our February issue an editorial entitled "Proprietary Medicines, Nostrums and Secret Synthetics" was by error credited to the *New York Medical Journal*. It should have been credited to the *New York State Journal of Medicine*.

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### CEDAR COUNTY.

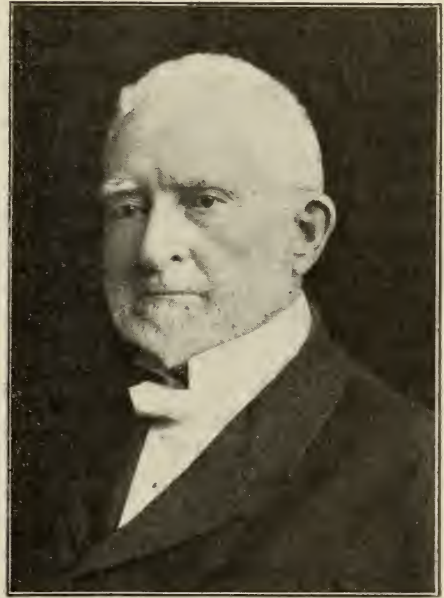
The latest addition to the list of affiliated county societies was organized last month at El Dorado



Springs. The following are the officers and members of the Cedar County Medical Society: President, Kimball Hill; vice president, R. O. Crawford; secretary, J. W. Dawson; board of censors, R. O. Crawford, A. E. Alder, E. H. Liston.\* Members, Kimball Hill, El Dorado Springs; R. O. Crawford, El Dorado Springs; J. W. Dawson, El Dorado Springs; R. B. Marr, Filley; A. E. Alder, Cane Hill; E. H. Liston, Balm; T. B. Younger, Stockton.

cess dares not stop short of the best possible preparation. "Progressive medicine depends largely on the progressive doctor, and the key note of progress is preparation." This edition of the *Interstate Medical Journal* is essentially a review of reviews well worth perusal by the profession.

## OBITUARY.



## THE INTERSTATE MEDICAL JOURNAL.

The January number of the *Interstate Medical Journal* gives a comprehensive review of the progress of medicine and surgery during the past year, the department editors giving an epitome of the work, at home and abroad, in their special departments of medicine. It brings before us the great and wonderful progress that this science has made, and emphasizes the statement made in a recent address that progressive medicine never hurries, never lags, never rests, because there is no rest in science. This "review" also brings before us the great amount of research work which is being done by various members of the profession, much of which is done or directed by the men having the largest practice; this has done much towards removing medicine from the empirical to the practical. It also proves that the progressive men in our profession are men of the highest educational and scientific attainment and that the physician who hopes to make the real suc-

cess dares not stop short of the best possible preparation. "Progressive medicine depends largely on the progressive doctor, and the key note of progress is preparation." This edition of the *Interstate Medical Journal* is essentially a review of reviews well worth perusal by the profession.

Dr. Elisha Hall Gregory died Sunday, February 11th, 1906, at Ormond, Florida, at the age of 81 years. He was born in Logan County, Kentucky, on the 10th of September, 1824, the son of Charles Gregory and Sophia Pleasants (Hall) Gregory, both natives of Fredericksburg, Virginia, who emigrated to Kentucky in 1820, and to Missouri in 1833, locating in the latter State at Boonville, at which place Dr. Gregory grew up, gained his education and finally studied medicine with Dr. F. W. C. Thom-

as, a man for whom Dr. Gregory expressed the highest esteem, considering him possessed of much culture and general ability. His first opportunities for observation, experience and practice in medicine were had in April, 1844, while living with the family of John Jameson, in Morgan County, Missouri, of whom the doctor speaks as having been a most excellent man, a plain farmer, and says that his memory is deeply impressed with the simplicity and uprightness, in general, of the family, long since dissolved, for, having returned to the spot after forty years of absence, he found them all gone. Dr. Gregory came to St. Louis in 1848 and began practice here in 1849, having been engaged entirely in the work of medicine ever since, as practitioner and teacher. His coming to St. Louis was a wise move on his part, the field being especially adapted to him and giving him the necessary stimulus to develop his great abilities. Almost from the beginning, he took first place as a member of the medical profession of St. Louis and as a citizen. He had the sterling, honest, earnest, conscientious qualities which win places for men. As a practitioner of medicine and surgery he has been eminently successful, and as a teacher of anatomy and surgery for close on to fifty years no one has surpassed him. Few have had the satisfaction of listening to more impressive lectures or of facing a teacher whose every element was more successful in imparting knowledge. Indeed, as a teacher, earnestness and honesty of purpose, and

a desire to teach the right thing in a manner to impress the pupil with proper knowledge and an appreciation of his obligations, seemed to be the controlling thought in his mind. As an evidence of his general culture and eminence as a citizen and physician, the St. Louis University some years ago honored him with the degree of LL. D., a great honor worthily bestowed. After having achieved the greatest eminence of his profession and in the community of his own city and state; having received general public and professional recognition; and having served as member of the board of health of the City of St. Louis, president of the state board of health of Missouri; president of the St. Louis Surgical Society; twice president of the St. Louis Medical Society, and as president of the State Medical Association of Missouri, he was in 1886, elected president of the American Medical Association. For more than half a century he served as a professor of surgery and anatomy in the St. Louis Medical College, which was formerly the medical department of the St. Louis University, and later the medical department of Washington University. Dr. Gregory, in private conversation, expressed his true sentiments when he said: "My greatest pride is that all the honors which I have held have been bestowed upon me by my profession." He was married on the 15th of April, 1845, to Miss Jael Smallwood, of a Maryland family, a native of Cooper County, Missouri. Twelve children were born to Dr. and Mrs. Gregory, of whom seven survive him.



FORTY-NINTH ANNUAL MEETING  
of the  
MISSOURI STATE MEDICAL ASSOCIATION.

Jefferson City, May 15, 16, 17, 1906.

PRELIMINARY PROGRAM.

Allen, T. C., Bernie, Malaria; Allison, Nathaniel, St. Louis, The Relative Value of Surgical Procedures for the Relief of Paralysis Following Anterior Poliomyelitis; Allen, J. M., Liberty, The Importance of the Sigmoid Flexure in the Production of Enteroptosis, Pelvic Displacement and Reflex Phenomena; Adams, J. Q., Bellevue; Ball, J. M., St. Louis, Some Recent Advance in Ophthalmology; Barclay, R., St. Louis, A Method of Radical Relief of Cases of Deafness Long Abandoned as Hopeless, Illustrated by Reports from Actual Practice; Bartlett, W., St. Louis, Lessons to be Drawn from Recent Operations on the Stomach; Brown, Tinsley, Hamilton, Arteriosclerosis; Baker, J. H. P., Salisbury; Brummall, J. D., Salisbury, Infantile Intussusception from the Country Practitioner's Standpoint; Broome, G. Wiley, St. Louis, Limitations of Surgical Procedures in Cancer; Campbell O. B., St. Joseph, Ectopic Pregnancy; Claussen, J. J., Kansas City, Epithelioma of the Lip; Chastain, E. N., Butler; Child, Scott, P., Kansas City, The Nervous System of the Child; Cordier, A. H., Kansas City, Non-Lithogenous Obstructions of the Biliary Ducts; Crossen, H. S., St. Louis, Some Questions Concerning the Treatment of Uterine Fibromyomata; Dalton, H. C., St. Louis, Abdominal Injuries; Davis, T. O., Maitland, Broncho-Pneumonia; Davis, E. P., Woodruff, Typhoid Fever; Dorsett, W. B., St. Louis, An Unusual Retroperitoneal Tumor in the Mesocolon Simulating a Fibroid of the Uterus; Edmonson, M. M., Kansas City, Some Remarks on the Treatment of Chronic Joint Disease; Elam, W. T., St. Joseph, Supra-Pubic Cystotomy as Preliminary to and as a Route for the Performance of a Considerable Number of Prostatectomies; Forster, Davis, St. Louis, Ovarian Function; Frankenburger, J. M., Kansas City, Rectal Abscesses; Frick, W., Kansas City, The Therapeutics of Eczema; Geiger, C. G., St. Joseph, Appendicitis; Gray, A. L., St. Joseph, the Use and Abuse of the Obstetrical Forceps; Greene-Wilson, Dora, Kansas City, The Present Status of Psychotherapy; Hertzler, A. E., Kansas City, The Treatment of Retroflexion of the Uterus; Hill, Roland, St. Louis, Obstructions of Small Intestines from Chronic Disease, with Report of Cases; Jarard, H., Pleasant Hill, The White Plague; Jurgens, H., Edina, Sup-



puration of the Superior Maxillary Sinus with Involvement of Ethmoidal Cells and Sphenoidal Sinuses; Kirchner, C. G., St. Louis. Surgical Aspects of Typhoid Fever; Lewis, C. O., Fayette. Albuminuretica; Lockwood, T. F., Butler, Criminal Abortion, a Prevailing Evil Against the Unborn Generation; a National Crime Committed for Mere Social Promotions; Mark, E. G., Kansas City. Pyuria; Matthews, F. H., Liberty. Mucous Colitis; McGinnis, H. F., Higginsville. Illegal Practice in Medicine; Miller, Sherman, Maysburg; Mitchell, C. M., Blythesdale. State Medicine; Morrow, C. J., Kansas City. Syphilis of the Nervous System; Mussen, E. H., Rockingham. Ear-tire as a Factor in Disease; Norman, J. B., California. Intestinal Auto-Intoxication; Potter, T. E., St. Joseph. Tuberculous Disease of Joints; Pearse, Herman E., Kansas City. A Method of Operating in Inguinal and Femoral Hernia When Complicated by Abscesses; Robinson, Ernest F., Kansas City. Gas Bacillus Infection: The Clinical Results of the Development in the Tissues of the Bacillus Aerogenes Capsulatus; Rothwell, J. H., Liberty; Sanders, St. Elmo, Kansas City. Surgery of the Liver; Seba, J. D., Bland, Spina Bifida; Stauffer, W. H., St. Louis. The Importance of Post-Operative Treatment in Diseases of the Rectum; Shy, M. P., Knobnoster. The Country Doctor and Appendicitis; Triplett, J. S., Harrisonville. Medical Reformation; Von Quast, Ernst, Kansas City. The Limitations of Surgical Interference; Walter, F. E., Perry. The Etiology and Cure of Hysteria.

## COUNTY SOCIETY NOTES.

## CHARITON COUNTY MEDICAL SOCIETY.

Chariton County Medical Society convened in regular session at Salisbury on January 25th with Dr. Kirkpatrick of Dalton in the chair. There was a good attendance of the members. Dr. Gordon Brown of Triplett was elected to membership. The committee on year book was instructed to have copies printed for the use of the members.

Dr. Austin of Brunswick presented a case of "Exophthalmic Goitre" in a girl twenty years of age. All the members entered into the discussion of this case and it proved to be very interesting and instructive. Dr. Kirkpatrick reported a case of "Subclavicular Dislocation of the Humerus" in a man aged sixty-six years. The dislocation was reduced fourteen months ago, but there remained inability to elevate the arm. In the discussion Dr. Austin thought there was a nervous rheumatic trouble and believed the case would get well in the course of time. Dr. Welch said that probably some ligaments had been ruptured either at the time of the injury or when reducing the dislocation. He believed there was an exudate and probably adhesions present and that there has not been time for repair. The age of the patient is against him. Dr. Tatum agreed with Dr. Welch's opinion and thought that the exudations and adhesions were responsible for the condition present. He advised the use of the x-ray for a more perfect diagnosis.

The next meeting will be held in

Salisbury on Thursday, the 22nd of February.

C. A. JENNINGS, Secretary.

## COOPER COUNTY MEDICAL SOCIETY.

The Cooper County Medical Society met in regular monthly session in the offices of Dr. R. L. Evans, at Boonville, on February 6th. Vice President F. R. Smiley in the chair. Members present: Drs. F. R. Smiley, R. L. Evans, J. R. Lionberger, J. S. Parrish. Dr. H. V. Cordry, physician to the Missouri Training School for Boys, was a most welcome visitor.

Several interesting clinical cases were presented and much profitable discussion followed in which many points in the treatment of the several cases presented were brought out. Considering the number of members present the meeting was an entire success, and it is to be regretted that the bad condition of the roads prevented many members from attending, many of whom notified the secretary of their desire to come, and expressed regret of their inability to attend.

The board of censors having found that Dr. H. A. McDonald of Pisgah, was eligible for membership, his name was duly presented. A vote resulted in his election to membership, and the secretary was ordered to notify the doctor of his election.

The name of Dr. H. V. Cordry, of Boonville, was presented for membership, and referred to the board of censors. There being no further

business before the society, the meeting adjourned to meet Tuesday, March 6th, 1906.

J. R. LIONBERGER, Secretary.

## HOWARD COUNTY MEDICAL SOCIETY.

Howard County Medical Society met at Fayette on February 2nd, the president, Dr. Bonham, in the chair. Members present: Drs. Wright, Lewis, Lee, N. E. Smith, Bonham, and Watts. Visitors: Drs. Burguin and Munn.

Dr. Burguin was requested to prepare a paper on "The Doctor as a Life Insurance Examiner" and read it at our March meeting. Dr. Wright was requested to prepare a paper on "Syphilis" and Dr. N. E. Smith a paper on "Colles's Fracture." these three papers to be read at the meeting on March 2nd. Dr. Smith reported a case of gun-shot wound of the right lung. Dr. C. O. Lewis reported a very interesting case of albuminuria and Dr. Bonham reported a case of ulcer of the leg.

The next meeting of the Society will be held on March 2nd.

C. W. WATTS, Reporter.

## HOWELL COUNTY MEDICAL SOCIETY.

Howell County Medical Society met in regular session on February 1st. There was a full attendance.

Excellent papers were read by Dr. D. J. Nichols on the "Treatment of Pneumonia;" Dr. R. S. Spears on "Sprains of Ankle," and Dr. H. J. Rowe on "Gastric Catarrh." These papers were generally discussed.

Dr. J. P. Williams, Willow Springs, and Dr. M. B. Chandler were elected members of the society.

Adjourned to meet April 5th.

H. C. SHUTTEE, Reporter.

## JACKSON COUNTY MEDICAL SOCIETY.

MEETING OF JANUARY 23, 1906

The Jackson County Medical Society met in the University building Tuesday, January 23rd, the president, Dr. E. H. Thrailkill, in the chair. Forty-seven members were in attendance at this meeting.

Application for membership were received from Drs. P. A. Johnstone, John Fowlston and W. E. Mabry, and referred to the membership committee.

The following were elected to membership: Dr. Annie J. Scott, Dr. J. E. Donaldson, Dr. J. H. Donaldson, Dr. W. L. Hoagland, Dr. B. A. Lieberman, Dr. Loren Swaney, Dr. Theodore S. Blakesley, and Dr. E. Lee Harrison.

An amendment to the By-laws providing for weekly meetings to be held every Tuesday evening, was adopted by the vote of the society.

Dr. C. B. Hardin, chairman, reported upon the consideration by his committee of the president's annual address; the following recommendations were emphasized: Change in the order of business, placing the Professional Program first; efforts to protect for the present, and later to improve the Medical Library; judicious management of the City Hospital; medical legislation, especially as regards advertisers and the criminal practices of irregulars; the securing a home for



the society, and the merger of the Kansas City Academy of Medicine and the Jackson County Medical Society.

Scientific Program: Dr. W. H. Coffey read a paper entitled "The Prophylaxis of Rectal Diseases." In the absence of Dr. C. J. Morrow, the discussion was opened by Dr. J. M. Frankenburger. Drs. Franklin E. Murphy, J. M. Langsdale, Fannie J. Henry, Dora Greene-Wilson, F. H. Brunig, E. von Quast, E. L. Stewart, and E. H. Thrailkill also taking part. Dr. Coffey closed the discussion.

Dr. Herman E. Pearse, who was to report a case of gun-shot wound of the intestine was unavoidably absent.

Dr. J. H. Laning reported a case of "Syphilitic Angina" which was accompanied by an infection resembling diphtheria very closely; some paralysis of the throat muscles followed the acute disease, though the Klebs-Loeffler bacillus was not clearly demonstrated. The patient recovered under antisyphilitic treatment. In the absence of Dr. Gaines, Dr. Franklin E. Murphy opened the discussion, Drs. Hardin, Frick, von Quast, Stewart and Brunig also taking part. The discussion was closed by Dr. Laning.

The society adjourned until its next regular meeting, January 30th, 1906.

#### MEETING OF JANUARY 30, 1906.

The regular weekly meeting of the Jackson County Medical Society in the club room of the Atheneum, University building, Tuesday, January 23rd, the president, E. H. Thrailkill, in the chair. Seventy-seven were in attendance at this meeting.

Applications for membership were received from Drs. A. L. Hearst, J. W. Green, R. L. St. Clair, and H. D. Hamilton and were referred to the board of censors.

Scientific Program: "A Symposium on Lobar Pneumonia," proved exceedingly interesting and instructive. Dr. John Wilson gave some valuable statistics relative to the disease and its complications: Dr. Franklin E. Murphy presented in detail the morbid histology of the lesions of the disease, and its etiology. Dr. H. D. Jerowitz considered the diagnosis; Dr. E. W. Schaulfler discussed the prognosis and conditions altering the same, while Dr. B. H. Wheeler outlined the treatment. (This Symposium appears in this issue of the JOURNAL, see page 592).

Dr. R. T. Sloan opened the general discussion, Drs. Scott P. Child, E. von Quast, A. A. Freyman, A. Miller, E. L. Stewart, and J. J. Clausen also taking part. The respective essayists in turn closed the discussion.

#### MEETING OF FEBRUARY 6, 1906.

The Jackson County Medical Society held its regular weekly meeting in the University building, Tuesday evening, February 6, 1906. President Dr. E. H. Thrailkill in the chair. There was an attendance of sixty-five at this meeting.

Dr. John Fowlston, Dr. P. A. Johnstone, and Dr. J. R. Kistler were elected to membership.

Dr. C. B. Hardin introduced a motion in writing to so amend the constitution and by-laws of the Jackson County Medical Society as to provide for the election of an execu-

tive committee, whose duty it shall be to deliberate upon matters of interest and present their report for action to the society in executive session. This motion was laid upon the table until a copy of same shall have been sent by the secretary to each member of the society.

Dr. Scott P. Child presented a resolution that this society request the editors of the various local newspapers to refrain from indiscriminately publishing the names of members of the Jackson County Medical Society in connection with any cases or interviews on medical subjects in which the latter might be engaged. After some discussion by Drs. Langsdale (con) A. A. Freyman (pro) and the secretary (pro), the motion was lost by vote of the society.

Dr. St. Elmo Sanders made a few remarks with reference to the prosecution of criminal abortionists, recommending that the Jackson County Medical Society lay aside a fund for that especial purpose. A motion by Dr. D. L. Shumate, duly seconded, prevailed, that the society reimburse Dr. Sanders for expenses incurred by him recently in some cases against suspected abortionists, and to render him moral and financial support in the future.

The first number on the scientific program was "The Report of a Case of Hemophilic Hematuria." by Dr. Eugene King. Dr. St. Elmo Sanders followed with the presentation of a case of "Splenic Anemia." Dr. Ben Jacobs read a report of a case of "Pernicious Anemia," and Dr. A. A. Freyman read a paper on "The Treatment of Anemia and Chlorosis." The discussion on each of the

numbers successively was opened by Dr. E. G. Mark in the absence of Dr. B. H. Zwart; Drs. C. C. Conover, Frank J. Hall and C. S. Merriman. Dr. Franklin E. Murphy opened the general discussion and was followed by remarks from Dr. A. E. Hertzler, Drs. Sanders, Jacobs, and Freyman closed the discussion.

#### MEETING OF FEBRUARY 13, 1906.

The Jackson County Medical Society held its regular meeting Tuesday, February 13th, 1906, the president, E. H. Thrailkill, in the chair. Seventy-five were in attendance at this meeting.

Previous to the regular program, Dr. J. N. Scott presented to the society a case of "Lupus of the Nose," in which the progress of the disease had been arrested by treatment with the x-rays.

The application of Dr. J. H. Ralston for membership was received and referred to the board of censors.

The scientific program consisted of a symposium on the subject "Gastric Ulcer." The etiology and pathology were discussed by Dr. A. E. Hertzler. The medicinal treatment was outlined in a very excellent paper by N. P. Wood of Independence. The surgical treatment was considered in detail and in a very creditable manner by Dr. E. F. Robinson, in the absence of Dr. Jabez N. Jackson, who was out of the city. Two cases of gastric ulcer, one of which was accompanied by a malignant growth were reported by Dr. Howard Hill; in both cases gastroenterostomy was performed and was followed by improvement. Dr. William K. Trimble presented a specimen of multiple ulcer of the thrombotic variety.



Dr. O. H. Dove opened the general discussion, Drs. J. F. Binnie, R. T. Sloan, Frank J. Hall, Franklin E. Murphy, W. J. Frick and Charles H. Lester also taking part. The discussion was closed by the respective essayists.

MAX GOLDMAN, Secretary.

### KNOX COUNTY MEDICAL SOCIETY.

The regular meeting of the Knox County Medical Society was held on February 3rd, Dr. L. S. Brown, presiding. Inclement weather and bad roads prevented a number of the members from being present.

The application for membership of Dr. W. F. O'Connor of Baring was received. Dr. Jas. Myers was appointed by the president to fill a vacancy in the board of censors. On motion the meeting adjourned until the first Monday in March.

HY J. JURGENS, Secretary.

### MARION COUNTY MEDICAL SOCIETY.

Marion County Medical Society met in regular session on February 2nd at Hannibal. Quite a large number of the members were present.

Dr. J. N. Primm read a paper on "La Grippe" which brought out a very interesting discussion. Dr. J. J. Farrell reported a case of "Empyema" in a child nine months old. Resection of the rib and drainage was instituted but the patient died within eight hours after the operation.

Dr. J. J. Bourn reported a case of "Fistula-in-Ano" and "Hydrocele" in an infant six weeks old. The hydrocele was relieved by injecting

two drops of pure carbolic acid.

Dr. A. J. Detweiler presented his transfer from Boone County Medical Society and was admitted as a member. The subject of an annual banquet was discussed and it was decided to have the banquet at the Mark Twain Hotel on February 15th.

The members are manifesting a great deal of interest in the society and the prospects seem excellent for a prosperous year.

E. H. ROUNDS, Reporter.

### NEW MADRID COUNTY MEDICAL SOCIETY.

Regular meeting of the New Madrid County Medical Society was held at New Madrid, February 1st. Members present: Drs. O'Bannon, Watson, Williams, Hollenbeck, Mayfield and Sparhawk. After reading and approving of minutes of the previous meetings, election of a board of censors was held with the following result: Drs. Williams, Hollenbeck and Mayfield for terms of three, two and one year respectively. Following this there was some discussion on business matters.

As there was no regular program for the evening, the chair asked for reports of any new or peculiar cases. Dr. Sparhawk told of a case of "Vitiligo" in a fourteen year old negro boy. Dr. Hollenbeck reported a case of "Pyosalpinx" complicating gonorrhea. On motion the next meeting will be held at Portageville.

After the meeting a supper was prepared for the out of town members by the members residing in New Madrid. This was greatly appreciated and enjoyed by all.

W. J. SPARHAWK, Reporter.



## PLATTE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of Platte County Medical Society met Wednesday, February 7th, in Platte City. The following members were present: Drs. Chastain, Barr, Naylor, Davis, Redman and G. C. Coffey. The minutes of the previous meeting were read and approved. A very interesting clinic was presented consisting of a case of fibroid of the uterine of eight years' duration.

After much discussion it was agreed to have a class in post graduate work in the society for the next year. Next month's program will be a general discussion on "Antipyretics" and "Percussion and Auscultation of the Chest."

Dr. H. M. Clark of Platte City, Dr. P. S. Gardner of Waldron and Dr. C. E. Benham of Parkville were unanimously elected as members of the society.

The committee on Public Health and Legislation was instructed to turn over to the prosecuting attorney the names of all who were practicing medicine in the county without a license.

The action of the American Medical Association. *Collier's Weekly* and the *Ladies' Home Journal* in exposing the patent medicine frauds was indorsed.

Adjourned to meet in Platte City Wednesday, March 7, 1906.

### ADDRESS BY THE PRESIDENT, DR. C. H. CHASTAIN.

I heartily appreciate the honor you have bestowed upon me by elect-

ing me president of this society for the ensuing year.

I am going to begin my duty today by telling you briefly what I think this society should be and I hope that when I have finished I shall have the hearty co-operation of every member of the society, and that before this year is ended we will have a larger and better organization than we have now.

You will all agree with me when I say that the object of this, as well as the State and the American Medical Associations, is to lift the medical profession out of the channel into which it has been placed and running for the past few years, and put it in the highest place of honor, where it once was and should have remained; and having accomplished this, to maintain its position by holding the principles of medical ethics so high that charlatanism in any form can not touch it.

To do this our society must live up to the constitution and by-laws which it has adopted.

One great trouble is that the quacks are better organized than is the medical profession. Any one who chooses can be a quack, but it takes a gentleman to be a professional man.

The greatest trouble is that quacks are allowed to become members of these associations and that the associations are working against themselves by allowing quacks to remain in them; by so doing these organizations have lost their dignity and the whole thing becomes a farce.

The public has come to look upon the medical man as a hired man and will demand a diagnosis, and when it is given, as it should never be

hastily, they will suggest the treatment.

If you object they will go to doctor somebody, who has an advertisement as long as your arm in every paper in the country, and will take his diagnosis and pay him more than they will the family physician. I say the profession is to blame for the present state of affairs, and the profession it is that will have to get right before it can expect the proper respect and confidence of the people.

Is it not a fact that here in our own county men who are graduates in medicine have fallen so low as to use the cloak of an honorable professional man to boot-leg whiskey to the public? Can you conceive of anything more degrading to a profession which, when legitimately followed, calls you into the inside secrets of the family life, places you in a position of confidant and counsellor to those who employ you—a position of sacred trust which is invested in no other profession.

Then comes the abortionist and all other disreputable and obnoxious persons who have the gall to stand behind the diploma, making drunkards and committing murders for the dollar and calling themselves Doctors of Medicine. It is this class of worse than thugs that cut the fees of a legitimate practice for the simple reason that they do not depend upon legitimate practice for a living. Older men in the profession can tell you of the time when a doctor of medicine was the most respected man in the community. Is it so now? I say it is not; and I have given the cause for the downfall. It has been said in this room that the Platte County Medical So-

ciety wanted every licensed practitioner in the county to become a member of this organization; I am certain this was not thought of before it was said—for you all know that there are licensed men in this county, as well as in every other county, whose membership in any ethical society would pollute it to such a degree that it would be unfit for a gentleman to belong to.

There are also men who do not belong to the society who are worthy and would be an honor to any organization they choose to join: gentlemen, it is the latter class we want in this society, and if we keep it clean it is the kind we will have.

In conclusion I wish to suggest that instead of having programs printed each month we commence next meeting and make the remainder of this year a post-graduate course by taking up anatomy, physiology and pathology, knowing each month what is to take place the next and make it a society of research and learning which will benefit all; also, to instill into our meetings at stated intervals social meetings not only for the medical but the other professions.

G. C. COFFEY, Secretary.

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## ST. LOUIS MEDICAL SOCIETY.

MEETING OF JAN. 20, 1906.

The committee on public health and legislation made a report and recommended that the matter of medical inspection of public schools, in which they have been for several months trying to interest the school board, but without effect, be referred to the joint medical council



for action. The report was adopted by the society. It is proposed, if possible, to get the school board to institute a system of medical inspection similar to that in operation in many other cities. It seems strange that in a matter of such importance to the life and health of the school children of our city, the board of education should be so indifferent.

Dr. Malvern B. Clopton read a paper entitled "Osteitis Deformans." The doctor gave an excellent description of the pathological changes which take place in this rare disease of which so little is definitely known, and reported two cases which had come under his observation. The paper was discussed by Drs. Allison, Warfield, Wells, Schwab, Grindon and Hoge.

Dr. Julius F. Menestrina read a paper entitled "Are We Conservative in Removing Bony Structure from the Foot for Drainage in Sepsis." The essayist first considered the anatomy of the foot and from that showed how hard it often is to secure drainage in septic troubles in this location without removing bony structure and concluded that it is conservative surgery. Discussion by Drs. Morfit, Funkhouser, Grindon and Sharpe. Attendance 62.

#### MEETING OF JAN. 27TH.

After the reading of the minutes and reports of various committees, the society listened to the reading and discussion of two very interesting papers. The first "Ocular Manifestations of Syphilis," by Dr. Carl Barck, is a valuable contribution to the literature on this subject. This disease causes 15 per cent of all blindness, 50 per cent or

more of all cases of iritis, quite a large per cent. of keratitis, and many other forms of eye trouble; indeed, no structure of the eye is exempt from syphilitic inflammation, and from the discussion of the paper one would judge that it is the rule among oculists, in obscure cases, to institute anti-syphilitic treatment. The paper was discussed by Drs. Henderson, Grindon, Green, Shoemaker, Murphy and Jennings.

Dr. James Mores Ball read the second paper entitled "Report on a Case of Subhyaloid Hemorrhage." He reported a case now under treatment, and presented a picture of the fundus of the eye, clearly showing the outline of the clot. He stated that the prognosis as to recovery of sight was good—much better than where the hemorrhage is in the substance of the retina. Discussion by Drs. Green, Barck, Henderson and Jennings. Attendance 76.

#### MEETING OF FEB. 3RD.

The greater part of the time at this meeting was taken up in the discussion and adoption of a proposed amendment to the city charter intended to divorce the city medical institutions from politics.

The following candidates were elected to membership: Floyd W. Bennett, 2828 St. Vincent Avenue; Joseph W. Charles, Humboldt Building. William Engelbach, Mermod-Jaccard Building. A. E. Ewing, 5956 Cabanne Avenue. M. George Gorin, 4225 West Belle Place. E. E. Holt, 1532 Franklin Avenue. Harry W. Loewinstein, 2615 N. Taylor Avenue. S. E. Newman, 465 N. Taylor Avenue. Edward H. Skinner, 2313 Washington



Avenue. O. H. Brown, Grand Avenue and Caroline street. George S. Drake, Jr., Humboldt Building. John L. Evans, 1600 California Avenue. Walter Fischel, City Hospital. Fred B. Hall, 2917 Washington Avenue. F. C. E. Kuhlmann, 2135 St. Louis Avenue. A. P. Munsch, 1504 Wagoner Place. Eugene T. Senseny, 2829 Washington Avenue. Waldemar Ude, 3531 S. Grand Avenue.

The society then took up the scientific program as prepared by the executive committee. Dr. George Homan read a paper "Remarks on Hook-Worm Disease (Uncinariasis) with Report of Case." He entered fully into the etiology, pathology, symptomatology, and treatment of this disease, which is very rare in Missouri, but of frequent occurrence in the southern Atlantic and Gulf States. It is only a few years since the cause was discovered to be an intestinal parasite, and the proper treatment (menthol in large doses), instituted. The case reported was a man who contracted the disease in Alabama eighteen or twenty years before coming under Dr. Homan's observation. Discussion by Drs. Warfield, Green and Meisenbach.

Dr. R. B. H. Gradwold made some remarks on "A Newly Discovered Intestinal Parasite," illustrated by pictures of the worm and its eggs. The doctor found the worm in a chimpanzee; it is cyst-forming in its nature and the doctor believes he is the first to discover and describe it.

Owing to the late hour the reading of a paper by Dr. John C. Morfit, entitled "Graft in Medicine," was postponed until a future meeting. Attendance 103.

#### MEETING OF FEB. 10TH.

The society was called to order at 8:15 p. m., the president, Dr. Geo. Homan, in the chair. Minutes of previous meeting read and approved.

The following candidates were elected to membership: Dr. N. W. Amos, 3001 Olive St.; Dr. W. J. Miller, 3414 Park Ave., and Dr. Louis N. Temm, 3514 N. Market St.

The committee on publication and debate reported that they had submitted a proposition to several medical journals for the publication of the society proceedings. The JOURNAL MISSOURI STATE MEDICAL ASSOCIATION having complied with their requirements they therefore moved that it be made the official organ of the society. Motion carried.

The committee having in charge the prosecution of the advertising quacks, reported the progress which has been made along this line, and moved that they be authorized to instruct Mr. Barth, the attorney who has been looking after the interests of the society, to continue to assist the city attorney, not only in the prosecution of these advertisers, but also to bring suit against the newspapers publishing such advertisements. Motion carried.

This committee is doing a great work; already a number of the objectionable advertisements have dropped out, many of the remaining have been greatly changed. It is reported that one paper has cancelled advertisements of this character to the amount of \$15,000, and the end is not yet. The committee also moved that the St. Louis Medical Society invite all other medical, surgical and dental societies of the

state to co-operate with us, in an attempt to oust from the state all corporations now practicing medicine, surgery and dentistry unlawfully. Motion carried. It is said that this can be easily accomplished and has the sanction of the Assistant Attorney General.

The scientific program consisted of a symposium—"The Control of Infectious Diseases." The part assigned to Dr. C. A. Snodgras, Health Commissioner, was "Municipal Control of Infectious Diseases." The doctor read and commented on the different ordinances relating to the subject and explained the working of the health department.

Dr. A. S. Bleyer—"The Duties of the Practicing Physician to the General Public in Infectious Diseases." The doctor touched on the milk supply, ventilation of public buildings and conveyances, isolation and disinfection.

Dr. C. H. Powell on "Obligation of the Practicing Physician to His Patient and the Patient's Family in Infectious Diseases." This paper dealt with isolation, disinfection, food and water supply, vaccination, and the use of diphtheria antitoxine not only as a curative agent, but also as a prophylactic.

Dr. W. G. Moore—"Duties of the Board of Education in the Control of Infectious Diseases." Dr. Moore discussed medical inspection of schools, vaccination, the return of children to school after recovery from infectious diseases, and teaching the children in regard to these subjects, thus through the children reaching the parents.

The papers brought out a very general discussion. We hope that

our executive committee will give us many more scientific programs similar to this, as it is certainly very profitable as well as entertaining.

#### MEETING OF FEB. 17TH.

Dr. P. Y. Tupper was elected to fill the vacancy in the committee on ethics, caused by the death of Dr. E. H. Gregory.

Prof. W. J. McGee read a paper entitled "A Case of Thirst, based on Recent Observations in the Arid Regions." The case reported was that of a Mexican, who was on the desert eight days with only one day's supply of water. The professor described very minutely the conditions and symptoms of this case which breaks all records as to length of time one can live without water, the great majority of cases dying within three days. This was a very interesting and instructive paper. Discussion by Drs. Funkhouser, Barclay, Homan, Moore, Boisliniere, Sutter, Kieffer, Henderson, Gellhorn, Goodloe, Fleming and Glasgow.

The second paper of the evening, "Graft in Medicine," by Dr. John C. Morfit, was also an interesting one, although the doctor only discussed one of the many phrases of this subject, viz., the division of fee between the specialist and the general practitioner—this he condemned in very strong terms as unethical and degrading to the medical profession. Discussion by Drs. Moore, Barclay, Dorsett, Green, Glasgow, Kieffer and Tuttle.

#### MEETING OF FEB. 18TH.

The society met in special session, at the Y. M. C. A. building, for the



purpose of holding memorial services in honor of the late Dr. Elisha Hall Gregory, who died at Ormond, Fla., Feb. 11, 1906.

By the death of Dr. Gregory the St. Louis Medical Society loses one of its oldest and most valued members. He was a teacher of medicine for over fifty years, surgeon in chief of Mullanphy Hospital for half a century, ex-president of the St. Louis Medical Society, St. Louis Surgical Society, Missouri State Medical Association, State Board of Health and of the American Medical Association.

Following the introductory remarks by the president, Dr. Geo. Homan, an invocation was pronounced by Archbishop J. J. Glennon, after which His Grace made some remarks on the life and character of Dr. Gregory. Dr. David C. Gore, president of the Missouri State Medical Association, spoke on "Dr. Gregory as a Physician and Surgeon;" Hon. A. M. Dockery, former governor of Missouri, on "Dr. Gregory in His Civic Capacity;" Dr. W. G. Moore on "Dr. Gregory as a St. Louisan;" Dr. Frank J. Lutz on "Dr. Gregory as a Medical Teacher."

The report of the committee on memorial and resolutions was read

and adopted, after which society adjourned.

I. E. GRAHAM, Reporter.

## ST. LOUIS COUNTY MEDICAL SOCIETY.

The St. Louis County Medical Society held the second regular meeting of 1906 on February 14th, at 2:30 p. m., at Clayton.

After approval of minutes of December and January meetings, the order of business was temporarily suspended and reports heard from various committees.

Report of committee on meeting place was read by Chairman Wyer. This committee did not render a definite report. Rooms at Kirkwood, Maplewood and Clayton were considered, consensus of opinion favoring the change to Kirkwood. After considerable discussion it was moved to delay vote on the matter until the next regular meeting, the secretary to instruct absent members to that effect.

Report of committee on Revision Fee-Bill was read and after a few minor corrections was adopted as read. Owing to the lateness of the hour Dr. Wyer's paper on "Lobar Pneumonia" was read in part only: the remainder will be read at the next meeting.



## AMERICAN MEDICAL ASSOCIATION.

### Next Annual Meeting at Boston, Mass.

President-Elect: WM. J. MAYO, Rochester, Minn.

President: LOUIS S. McMURTRY, Louisville, Ky.

First Vice-President: WALTER WYMAN, Washington, D. C.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

Treasurer: FRANK BILLINGS, Chicago.

## MISSOURI STATE MEDICAL ASSOCIATION.

### Next Annual Meeting, Jefferson City, May 15, 16, 17, 1906.

President: D. C. GORE, Marshall, Mo.

Vice-Presidents:

C. D. AVERY, Troy; J. P. BURKE, California; F. A. GLASGOW, St. Louis; T. F. LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.

Secretary: C. M. NICHOLSON, St. Louis.

Assistant Secretary: E. J. GOODWIN, St. Louis.

Treasurer: J. FRANKLIN WELCH, Salisbury.

## COMMITTEES.

### Committee on Scientific Work.

C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.

### Publication Committee.

C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes, W. B. Dorsett.

### Committee on Public Policy and Legislation.

F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.

### Committee on Arrangement.

Drs. I. N. Enloe, A. W. McAlester, C. M. Chastain, J. P. Porth, G. Ettmueller, J. L. Thorpe, C. P. Hough.

## COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.\*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, Lewis.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Liberty. Counties: Clay, Ray, Platte, Clinton, Caldwell, DeKalb, Gentry, Harrison, Worth, Daviess.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, St. Francois, Reynolds, Iron, Perry, St. Genevieve.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: Bollinger, Scott, Madison, Cape Girardeau.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Monticau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Hickory, Cooper.

Fourteenth District.—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Dade, Barton, Cedar, Vernon.

Sixteenth District.—R. L. Johnson, Rolla. Counties: Dallas, Crawford, Phelps, Pulaski, Laclede, Dent.

Seventeenth District.—J. E. Tefft, Springfield. Counties: Greene, Christian, Stone, Barry, Lawrence, Webster, Polk, Taney.

Eighteenth District.—H. C. Shuttee, West Plains. Counties: Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

\*Counties in *Italic* are unorganized.

# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

Volume II

APRIL, 1906

Number 10

## ORIGINAL ARTICLES

### AN HISTORICAL SKETCH OF THE MOVEMENT TO ESTABLISH A STATE SANATORIUM IN MISSOURI FOR PERSONS HAVING INCIPIENT TUBERCULOSIS.\*

BY GEORGE HOMAN, M. D., ST. LOUIS.

The recital of efforts made and failures encountered in attempts to bring about changes affecting the general weal in any existing situation always possesses a human interest, and this is especially true when such needed changes are perceived clearly by but a few, and the number virtually restricted to a single profession or calling—in that case their appeal is often as the voice of one crying in the wilderness unheard or unheeded by those in whose behalf their efforts primarily are made.

Such was the experience of those concerned in the sanatorium movement in this country a generation ago when private individuals sought to attract public and official attention to the open air treatment of pulmonary tuberculosis by means of institutions situated in isolated localities, and dependent for support on the meager income yielded by patients, and the occasional benefactions of well-wishers and friends.

The credit for having effectively brought to public notice the merit of this mode of handling this problem is due in large measure to Dr. Edward L. Trudeau who went into the wilderness in 1873 to save his own life, and in 1884 opened a modest institution at Saranac Lake, New York, he having borrowed the idea from German practice and teaching, Brehmer in particular being his model. Other private sanatoriums followed, and the cumulative favorable influence of their example operating through a decade or more led to official action by Massachusetts in 1895, to whom belongs the distinction of having been the first American commonwealth that devoted public funds to such an enlightened purpose.

Other states imitated more or less closely the example thus set, and in this honorable roll Missouri stands ninth, having been preceded by Minnesota and Ohio—these three being the only inland states that have

\*Read by title at the meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

taken this advanced official step.

The movement which culminated in this action by the Forty-third General Assembly of Missouri was formally initiated by the Medical Society of City Hospital Alumni of St. Louis at the meeting held on Nov. 21, 1901, when the following preamble and resolutions were unanimously adopted:

Whereas, The provision by state government of sanatoriums for the reception and care of tuberculous persons has become an acknowledged necessity for the better protection of the public against tuberculosis in its varied forms; and

Whereas, Several states already possess such sanatoriums while Missouri, although the fifth state in the Union in order of population, has taken no step toward providing for the establishment of such an institution: therefore, be it

Resolved, That the Medical Society of City Hospital Alumni recognize the urgent necessity for an adequate institution designed for the exclusive care and treatment, both hygienic and medical, of tuberculous persons in the state of Missouri, the said institution to be erected and maintained by the State government.

2. That this Society shall at once, by correspondence and otherwise, seek to enlist the active co-operation of other medical societies and bodies, and of the public press throughout Missouri to the end that a sanatorium, commensurate with the importance of the object sought, be authorized by legislative action, the same to be erected in some suitable location in the mountainous part of the State.

3. That copies of these res-

olutions be transmitted to all other medical societies in the State, to medical colleges, to the medical press and to the local daily press, to the Governor, and members of the General Assembly; and that a persistent agitation of this subject be maintained in order that public opinion may be so influenced as to secure favorable action by the next legislature toward the more effectual prevention and control by approved methods of one of the most destructive diseases to which mankind is liable.

A special committee, consisting of the writer and Drs. Ludwig Bremer, Louis H. Behrens, Francis Reder and R. B. H. Gradwohl, was appointed to have charge of the work and enlist public and professional interest in the undertaking.

Other medical societies responded favorably, and the next year (Oct. 25, 1902) the St. Louis Medical Society officially recognized the importance of the subject, as follows:

Whereas, Medical opinion with practical unanimity favors the erection of special institutions, known as Sanatoriums, for the care and treatment of persons having pulmonary tuberculosis in its earlier stages; and

Whereas, The United States Government has established two such institutions, for sick soldiers and seamen respectively, while the States of Massachusetts, Connecticut, New York, Minnesota and New Jersey all either have such sanatoriums now in successful operation, or have enacted legislation to secure the same; and

Whereas, The need for such an institution, erected and maintained by the state, is obvious to everyone who is acquaint-



ed with the ravages of tuberculosis among our population; therefore, be it

Resolved: That the St. Louis Medical Society of Missouri, recognizing the present necessity for the employment of all modern scientific and hygienic means and resources of approved value in combating the spread of tuberculosis, would respectfully represent to the State authorities the importance and duty of enacting legislation providing for the erection and maintenance of such an institution in Missouri with as little delay as circumstances permit.

Second: That this Society desires the active co-operation of all other medical bodies, and of the medical profession generally throughout Missouri, in bringing this subject to the careful attention of the Governor and other state officials, and to the consideration of the members of the General Assembly.

Third: That a bill for establishing said institution be prepared and presented to the next session of the General Assembly, urgently requesting prompt action in the premises.

Fourth: That notification of this action be given to all other medical societies and to the press throughout the state.

A special committee of five was appointed by this Society also to forward the object, the committee so appointed being the writer, as chairman, Drs. F. J. Lutz, William Porter, R. M. Funkhouser and W. G. Moore.

The committees of these two societies worked in complete accord and conducted an earnest campaign throughout the state by means of letters and circulars to all local societies, together with appeals for

signatures to forms of petition provided addressed to the Forty-Second General Assembly asking for necessary legislation to make the movement effective. The responses on the part of the profession was prompt and hearty, the reorganizing impulse then very generally felt throughout the state, and which has had such a strengthening influence on the State Association, aiding greatly in this respect. Effective help was also rendered by the Missouri State Society for the Prevention of Tuberculosis of Kansas City, the president, Dr. R. O. Cross, visiting St. Louis for the purpose of conferring with the local committee.

A bill was prepared by the joint committee providing for a sanatorium and asking for \$150,000, for this purpose. It was introduced in the House February 5, 1903, and referred to the Committee on Eleemosynary Institutions, before which committee Drs. Porter, Funkhouser and the writer appeared at a hearing called for the purpose, and submitted testimony derived from professional experience and official sources in support of the measure.

The committee reported the bill favorably to the House with recommendation that it be referred to the Committee on Appropriations, which was done. No report on the bill being forthcoming from that source, a request for a hearing was finally granted, Dr. Gradwohl and the writer appearing and offering arguments in favor of the bill. The vote in committee, however, was adverse and for the time being nothing further could be done.

The Medical Society of City Hos-

pital Alumni declined to discharge its committee when report of this failure was made, and it was continued, taking up the work again in the fall of 1904 in co-operation with the newly formed standing committee on Public Health and Legislation of the St. Louis Medical Society composed of Drs. R. M. Funkhouser and F. L. Henderson, the writer being chairman.

Much work in preparation for the meeting of the legislature was done, the first named society re-affirming December 15, 1904, the action of 1901, the only change made being in paragraph 2 of the resolutions providing that the proposed institution be in some suitable location "within the territory" of the state, instead of in the "mountainous part," former experience at Jefferson City having shown that sectional prejudices were aroused by that provision.

The St. Louis Medical Society on Nov. 5, 1904, re-adopted its former declaration adding thereto the following section in recognition of the influence of the State Association in its reorganized capacity:

"Fifth: That the Committee on Public Health and Legislation of this Society be authorized to communicate with all the societies in affiliation with the Missouri State Association with the object of enlisting their influence and support to further the above purposes, and co-operate with the committee of the State Association on Public Hygiene and Legislation."

Following the annual (1905) elections of the two local societies named, the personnel of their committees

was somewhat changed the writer being retained as chairman of both—in the Medical Society of City Hospital Alumni committee Drs. Bremer and Reder were replaced by Drs. B. M. Hypes and H. L. Niertert; while in the St. Louis Medical Society committee Drs. Funkhouser and Henderson were succeeded by Drs. John Young Brown and H. J. Scherek.

These committees, again acting jointly and harmoniously, pressed the work, and presented a bill which was introduced in the House on Jan. 18, 1905 (becoming Bill 226 on the calendar) by Hon. James Stewart, a physician and Representative from Warren county. The bill was referred to the Committee on Sanitation and Hygiene, Dr. Stewart being the chairman, and, as later favorably reported, provided for an institution for incipient consumptives with an appropriation of \$50,000 instead of \$100,000, as was asked for.

The bill then went to the Committee on Appropriation, Dr. A. C. Pettijohn of Linn being chairman, and, after considerable delay was reported without recommendation. It was, however, put upon its final passage in the House on March 10 the vote thereon being 81 ayes to 20 nays, all the medical men present voting in the affirmative. It passed the Senate on March 15 without dissent, twenty-eight Senators being present and voting—this result being due in a very considerable measure to the skillful handling of the bill by Dr. Frank DeVilbiss, Senator from the Twenty-seventh District, and chairman of the committee having it in charge.



This enactment was approved by the Governor on April 15, and will become effective ninety days after the adjournment of the Legislature, which occurred March 18, the ninety day period being completed on June 16, 1905.

That the seed sown during the previous years had fallen on good ground was evidenced in part at least by the fact that no opposition of consequence was developed during the session, the consensus of expressed opinion as elicited by the writer on the occasion of his only visit to Jefferson City this year in the interest of the bill made on March 9th, having been entirely favorable.

It may be worth while to point out in this connection the causes that appeared to favorably influence the legislative mind, and to draw some general conclusions therefrom.

As has already been mentioned the general movement in the profession in recent years toward the better organization of its numbers and strength was a factor of the first importance—the time was ripe and the profession responded promptly, and this beneficial work is still proceeding to the manifest advantage of both physicians and the public.

The education of the profession as to the active cause of tuberculosis through the discovery of Koch, together with the spread of knowledge concerning the open air treatment of the disease in this country and abroad, and the extension of this information through popular channels to the people rapidly prepared the way for legislative action in the different States such as the

last few years have witnessed.

The physicians connected with sanatoriums, both private and public, very early perceived the educational character and importance of such institutions, being in nature schools rather than hospitals,—that the persons helped or cured there would become missionaries among their fellows, and thus accomplish a leavening of the population mass that would be entirely impossible otherwise; and, added to precept and instruction of practicing physicians in their respective communities, to this influence is due the swift maturing of public opinion on the question of the cause and rational treatment of consumption, and the generally favorable attitude of legislators in this respect.

The facilities afforded by multiplied local societies for obtaining adequate expressions of medical opinion on the tuberculosis problem, and such expressions being communicated directly to representatives in the legislature, was doubtless very effective, for a number of county societies were conspicuous for the energy and decision of their action.

At Jefferson City it was generally conceded by visitors that the quality of the legislative material was above the average, medical men being more numerous than usual, and this element occupied a commanding position in committee assignments, especially in the House.

Another factor that to some extent probably had its influence was the differing partisan complexion of the two branches of the Assembly, each watched the other closely and in the main only measures of



merit withstood the scrutiny to they were subjected.

With a good cause therefore, in these circumstances, success was to be expected, but it was mainly to the advanced thought of the profession and the manner in which this was brought to bear on public opinion that Missouri enjoys the credit of being second in the list of states in

the Mississippi valley that has devoted public funds to a campaign of education in the war on consumption; and this success only emphasizes the need for still better organization in order that the contests of the future may be entered upon with full confidence in the justness of the undertaking and reasonable assurance of a prosperous outcome.

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## THE OCULAR MANIFESTATIONS OF SYPHILIS.\*

BY CARL BARCK, M. D.

Of the organs of special sense none is so frequently affected by Syphilis, acquired as well as hereditary, than the eye. The syphilitic lesions of the eye are dealt with under various chapters in the textbooks, on the different topics, therefore it might not be amiss to consider them collectively under a more general aspect. Furthermore I shall not dwell as much on the more frequent and well known affections, but on a number of rarer ones which are not generally known.

The syphilitic eye affections are naturally divided into those due to congenital and those due to acquired syphilis.

*Congenital Syphilis.*—Hereditary syphilis is easily recognized in children, who present its symptoms immediately after birth. Later in life the diagnosis is not so easy and frequently quite difficult. Our objective diagnosis rests then mainly upon the presence or want of the trials of the so-called Hutchinson's symp-

tons, namely: Hutchinson's teeth, interstitial keratitis, labyrinthine deafness. To these three a fourth one may be added, which is just as characteristic as any of the other three, namely radiating, whitish scars around the ankles of the mouth and sometimes on the upper lips. It is generally conceded, that, if two of these four typical symptoms are well defined, the objective diagnosis of hereditary lues may rest assured; but from one symptom alone the diagnosis should not be made.

In rare instances we find affections of the lids and of the conjunctiva in form of ulcers and efflorescences due to hereditary lues. On the lids it might lead to loss of the cilia.

Tarsitis in children must always cause suspicion and careful examination. It might lead to enormous thickening of the tarsus, if not correctly diagnosed and treated accordingly. Affections of the lachrymal apparatus are not rarely

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caused by lues; the primary luetic affection is a periostitis or ostitis in the neighborhood of the lachrymal sac and nasal duct by which these are secondarily affected. Any sup-puration of the lachrymal sac in newborn babies or small children is suspicious and must induce us to consider the possibility of hereditary syphilis.

By far the most frequent heredo-syphilitic affection of the eye is parenchymatous or interstitial keratitis.

It is of course not necessary or intended to give here a description of its symptoms.

The older authors brought interstitial keratitis in connection with scrofulosis. Hutchinson, in the beginning of the last century, was the first one who maintained and established hereditary syphilis as a causal factor. In that he went too far; as he considered heredo-syphilis as the exclusive cause of parenchymatous keratitis. Later researches modified this view; but the opinions of different authors were at considerable variance. Graefe attributed 5 per cent., Davidson 20 per cent., Grosz 25-30 per cent., Panas 40 per cent., Fournier 41 per cent., Baslini 45 per cent., Michel 55 per cent., Saemish 62 per cent., Wecker 66 per cent., and Nettleship 68 per cent. to hereditary lues. A later statistic, comprising 1798 cases, communicated by 28 different authors, where a very careful inquiry into the presence of hereditary lues has been made, finds that 50 per cent. of the cases of interstitial keratitis are due to syphilis and we might accept this statement as giving our knowledge

at the present time.

The clinical picture of interstitial keratitis due to hereditary lues does not differ in any respect from that of the cases due to other causes; it only affects both eyes more frequently than the others. The age of the patients lies between 2 and 20 years; the first decade of life being the one in which the affection is by far the most frequent. In the third decade, the disease is very rare, but occasionally met with; I have seen two typical cases where the causal relationship with hereditary syphilis could be established beyond doubt, at the age of 27 and 29 respectively. It seems that girls are more frequently affected than boys. The most frequent complications of this keratitis are from the nvea: iritis or irido-choroiditis. Furthermore it seems, that these complications are met with oftener in the syphilitic forms than in the others. Old changes in the choroid and retina are frequently present and would be found oftener if the fundus would be examined carefully in all cases of interstitial keratitis. I shall revert to these fundus affections.

After the resorption of the corneal infiltrate some of the new-formed bloodvessels in the deeper layers of the cornea remain and are persistent throughout life. Even in cases where the cornea appears normal macroscopically, and where the vision has returned to the normal, some of these remnant bloodvessels may be discovered. They are visible with the ophthalmoscope, using a strong convex lens as a loupe. From them the diagnosis of a previous interstitial keratitis can be

made years and even decades, after the disease has run its course. It was Hirschberg of Berlin, who has first drawn attention to these facts. The presence of these persistent bloodvessels in the deeper layers of the cornea was later on confirmed by microscopical examinations by Baas.

The prognosis of interstitial keratitis is a fairly good one, especially if the causal factor is recognized and an appropriate antisyphilitic treatment instituted. In cases, where the diagnosis of heredo-syphilis is made soon after birth, the outbreak of interstitial keratitis, to which such cases are considerably inclined, can be prevented by proper treatment. Hochsinger found, that in 63 such children, which were energetically treated, the subsequent history of which he could follow for 20 years, interstitial keratitis did not ensue.

Whilst iritis and irido-cyclitis is by far more frequently due to acquired than to hereditary syphilis, the latter has sometimes these sequelae. The percentage, in which it is caused by the latter, ranges from 2-7 per cent. We find the different forms of iritis: serous, plastic, gumatons. The character of this affection is a chronic one with mild symptoms: little pain, slight injection of the eyeball; few and small synechiae; amenable to treatment.

Whilst congenital luetic affections of the retina and choroid have been reported occasionally as early as the beginning of the last century, it was especially Hirschberg and Sidler-Huguenin who called the attention

of the profession to these lesions. The former found them once amongst one thousand patients. The affection is frequently overlooked on account of want of prominent symptoms. Small children sometimes draw the attention of their parents to their eyes, because they hold the head in an oblique position or squint. The minute changes can be discovered only after a careful examination; frequently in such cases the diagnosis congenital amblyopia has been made.

Huguenin distinguishes four different forms. In the first one there are minute yellow-reddish or red-brownish dots scattered over the fundus. They are mainly located around the equator, occupying sometimes only one sector. In mild cases the central vision is found to be normal. In severe ones there might be atrophy of the optic nerve as a complication. The lesions remain stationary during life and are not progressive. In the second form large choroidal patches form, which lead to atrophy of the choroid, irregular whitish spots with pigmented margins. They are also more frequently found around the periphery of the fundus. In the initial stage of the affection the vitreous is cloudy, but clears up later on. Silex considers this form of choroiditis in persons below 15 years of age as a indubitable symptom of hereditary lues. The third form resembles very much Retinitis pigmentosa; but the patches of blackish pigment are more round against the typical star form in the former, and they are located in the zone intermediate between the center and the periphery;



furthermore they do not follow the course of the bloodvessels as in typical pigment-degeneration of the retina. Atrophy of the optic nerve accompanies this form more frequently than the others. The functional disturbances are more pronounced. The vision, central as well as peripheral, is considerably impaired. The prognosis is poorer than in the other forms of fundus affections, but better than in retinitis pigmentosa. The last form is central retino-choroiditis. From the appearance it can not be distinguished from central retino-choroiditis due to other causes. But if found in children, it must always cause suspicion as to the possibility of hereditary lues. It is a frequent cause for the development of strabismus.

These retinal and choroidal affections are as a rule not very progressive; appropriate treatment is able to improve the vision to a certain extent.

Neuritis optica, leading to atrophy of the optic nerve, has also been diagnosed upon the basis of hereditary lues. Uhthoff found, that amongst 253 cases of optic neuritis after infectious diseases, 51 were due to acquired and 10 due to hereditary syphilis. Whether primary descending atrophy of the optic nerve can be caused by hereditary lues, is questionable.

Periostitis of the orbit, with the usual consequences, like exophthalmus, etc., may be caused by heredo-syphilis as a few indubitable cases prove. More frequent are paralyses and pareses of the motor nerves and muscles of the eye. Huguenin

observed in 125 children with heredo-syphilitic changes in the fundus: strabismus 13 times, abnormal pupillary reaction 15 times, and nystagmus 13 times. The paralyses were partly present at birth or took place within the first years of life.

To what an extent congenital syphilis is responsible for congenital malformations of the eye, like microphthalmus, coloboma of the iris or choroid, corectopia, ectopia lentis or congenital cataract, is still an open question. Huguenin found amongst his previously mentioned 125 children, 12 cases of malformation of the eye-ball.

*Acquired Syphilis.*—When syphilis ravaged Europe in form of an epidemic at the close of the 15th century, various eye-affections were brought in causal relationship to it, partly without due foundation. A closer knowledge of those really due to syphilis was gained in the beginning of the last century only; and of the intraocular diseases, after the invention of the ophthalmoscope, 1851.

The eye can be affected either primarily by the direct action of the syphilitic virus or indirectly in consequence of affections of organs in its neighborhood, bones, brain, etc. A classification of the eye affections in regard to the three stages of lues can be given at large only, as there are many exceptions. Initial lesions of the eye are of course met with only externally, on the lids, conjunctiva or lachrymal organs. In the second stage we find mainly the uvea, especially the iris affected. Between the secondary and tertiary: Choroiditis, retinitis, neuritis opti-

ca. In the tertiary: parenchymatous keratitis and the formation of gummata in the most different parts. No tissue of the eye, not even the lens, is immune against syphilis.

Statistics show, that in about 4 per cent. of luetic patients the eyes will be affected; and that nearly 2 per cent. of all eye diseases are caused by syphilis. As to the different tissues affected, a statistic of 3622 cases finds the lesion in the iris and ciliary body: in 45 per cent., the optic nerve: 22 per cent., the muscles: 15 per cent., the retina: 7 per cent., the cornea: 3.5 per cent., the lids and conjunctiva: 1 per cent., and in the different other organs 6.5 per cent. In more than 50 per cent. syphilis affects both eyes.

The age at which luetic eye diseases are found most frequently, is between 20 and 40 years; possibly the third decade of life presenting the majority. According to Badal the curve rises rapidly until the 25th year, remains about stationary until the 45th, and then sinks rapidly. The reasons for this are obvious. As to the sex, men are affected in 2-3 of the cases.

The eye is sometimes the seat of entrance of the syphilitic virus, the primary chancre being located there. This may be found on the lids, the conjunctiva and sometimes the lachrymal sac. Between 200 and 300 of such cases are reported in literature. The manner of infection is quite different: through utensils, fingers, instruments, kissing, etc. A number of cases of auto-infection, from the chancre on the penis during the very first days, are also on gumma may fill the entire anterior

chamber and perforate the cornea record. The primary lesion on the eye presents the same features as elsewhere; the affected lid swells considerably and very soon the lymphatic glands on the neck, first on the same side, become indurated. The residues, after the chancre has healed, are relatively small. The subsequent course of the general infection is the usual one.

In constitutional syphilis we may find on the lids the different forms of syphilids, which we find anywhere else on the skin. A more characteristic affection is syphilitic tarsitis. It is usually seen during the second stage. There is a chronic and painless enlargement of the lid, up to the size of a pigeon egg, which palpation proves to be due to an increase of the size of the tarsus. The skin is movable over it. Prognosis good after appropriate treatment.

The conjunctiva may show symptoms in all three stages of lues. In the secondary we find catarrhal conjunctivitis, ulcers and papules of the conjunctiva and then a type of conjunctivitis granulosa, which closely resembles trachoma; but the conjunctiva is anemic and pale and of a dirty appearance. All local remedies are without benefit, whilst it yields rapidly to constitutional treatment. In the tertiary stage gummata of the conjunctiva are met with, most frequently upon the ocular conjunctiva. But a number of cases reported as such are open to criticism. For differential diagnosis epitheliomata, tuberculosis, chalazions, papules and even phlyctenae must be excluded, and the diagnosis of tertiary lues must be estab-



lished from other symptoms.

Just as in hereditary lues, the lachrymal apparatus becomes affected secondarily only, in consequence of syphilitic disease of the mucous membranes and bones of the nasal cavities.

Parenchymatous keratitis, the most frequent affection of hereditary lues, is caused in 3 per cent. only by the acquired disease. It is then nearly always associated with inflammatory processes of the uvea. The clinical picture does not differ materially from that of heredo-syphilis. Contrary to the rule, the female sex preponderates in acquired keratitis. It is met with during the secondary as well as in the tertiary stage. A rare form is punctuated or dotted luetic keratitis. There are in the deeper layers of the cornea a number (4-50) small gray or whitish infiltrates, between which the corneal tissue is perfectly transparent. The impairment of vision is slight, the iris frequently implicated.

Syphilitic scleritis and episcleritis is rarely found alone; it is nearly always associated with or rather preceded by intraocular affections. But a gumma of the sclera might be seen as the only symptom of tertiary lues.

As stated in the statistics, the seat of predilection for syphilitic inflammations is the iris and ciliary body. Up to 6 per cent. of all luetics are likely to become affected by iritis. As to the frequency of syphilis as the causal factor of iritis, the opinions vary considerably; on an average we might state, that about 50 per cent. of all cases of iritis are due

to lues. In about one-third of the cases both eyes are affected.

The type of syphilitic iritis is most frequently the plastic, rarer the serous and the gelatinous. Clinically there is no symptom, which is pathognomonic for a luetic origin. As a rule the inflammatory symptoms, especially the pain, are not as pronounced as in rheumatic iritis, but there are considerable differences in different cases. In about 1-3 there are complications in the fundus.

The affection of the iris takes place most frequently in the secondary stage, i. e. the first twelve months after the infection; sometimes in the very beginning of that. I have seen the condylomatous form as early as three months after the infection. The course of the disease does not differ materially from that of iritis due to other causes. The prognosis is not as good as in idiopathic iritis, but depends mainly upon the early causal diagnosis and consequent treatment. Posterior synechiae and their sequelae are frequently left. Gummatous iritis is of course met with in the tertiary stage. The seat of predilection is the ciliary portion of the iris and the ciliary body. The gumma may be isolated, or we find two or three in different parts. When they resorb after appropriate treatment an atrophy of the iris remains. If neglected, a or sclera. The prognosis of gummatous iritis is of course more serious than that of iritis in the secondary stage; Nearly 50 per cent. of the cases end in blindness. For differential diagnosis tubercles of the iris come mainly into



consideration. The nodules of the latter are smaller, more numerous, the color more yellow-whitish against the brown-reddish of a gumma, and the inflammatory symptoms are less severe. But a careful history is essential for differential diagnosis.

Syphilitic affections of the choroid can in many instances not be separated from those of the retina: Chorio-retinitis; whilst in a number we find exclusively the choroid or the retina affected. We can distinguish the following forms of luetic choroiditis: Acute irido-choroiditis; gummata in the choroid; diffuse chorio-retinitis and chorio-retinitis centralis. The diagnosis of any one of these forms can of course only be made with the ophthalmoscope. About one-half of these affections are seen in the secondary, the other half in the latter stages of lues. The main symptom being impairment of vision, the cases where the latter becomes at once manifest to the patient, as in central choroiditis or when the patches are near the center in other forms, will be seen earlier by the physician. We find frequently peripheral affections covering quite a large extent, and which must have existed for years, before the physician is consulted.

The types of syphilitic retinitis are: simple retinitis; disease of the larger bloodvessels accompanied by hemorrhages, and recurrent central retinitis. Whether retinitis pigmentosa may be caused by lues, is still an open question; the changes in the retina differ slightly, as mentioned already under congenital syphilis. The affection of the larger bloodves-

sels is one of their walls, arteritis and peri-arteritis. The arteries show a widened reflex, dirty discoloration of the blood column, and long whitish streaks along their walls. As a rule they are not obliterated; but the opacity of the walls may be so considerable, that the blood column becomes invisible. Sometimes the veins present similar appearances. Hemorrhages into the retina and vitreous take place frequently during its course. The prognosis of choroiditis and retinitis is fairly good, but only if a timely diagnosis, followed by antiluetic treatment is made. The latter must extend over a long period.

The optic nerve affections can be primary or direct ones; more frequently they are secondary. Of primary ones we find optic neuritis as well as retro-bulbar neuritis, with the symptoms typical to each of these diseases. They occur in one eye alone with about the same frequency as in both eyes together. Two-thirds of the cases occur within the first year after the infection. Whether simple (plain white) atrophy of the optic nerve can be caused by syphilis, is very doubtful. The cases reported as such give occasion to serious objections: cases of optic nerve atrophy due to tabes or progressive paralysis of course excluded.

Secondarily the nerve may be affected in consequence of luetic disease of the orbit, the optic foramen, basal meningitis or gummata, and finally diseases of the brain.

Glaucoma can be indirectly caused by syphilis, after iritis or irido-sys-

tilis, which lead to synechiae, closure of the pupil, etc.

In the orbit we find periostitis; its seat of predilection are the orbital margins, most frequently the upper one. It is usually accompanied by severe pain. When the seat is deeper in the orbit, exophthalmus will follow. In all cases of this kind a careful examination and differential diagnosis is necessary, as a number of cases are on record, where skilled diagnosticians made a mistake and subjected the patient to an unnecessary operation.

Paralyses of the external or internal eye muscles are of luetic origin in about 50 per cent., according to Alexander even 59 per cent. Their relative frequency in syphilitic patients has been given above. As regards the seat we distinguish intra and extra-cranial ones; the former into: cortical, fascicular, nuclear and basal ones. According to Mauthner the nuclear palsies are the most frequent. When the intrinsic muscles, sphincter of the iris and ciliary muscle are alone affected, the paralysis is nearly always a nuclear one. Paralyses of the intrinsic muscles make up 25 per cent. Of the extrinsic muscles the motor oculi heads the list. Amongst 584 cases, branches of this nerve were paralyzed in 73 per cent., the abducens in 24 per cent., and the trochlearis in 3 per cent. only. The paralyses of the eye muscles occur in the main in the later stages of syphilis, some years after the infection, even as late as 15 to 34 years. The prognosis is doubtful; relapses are frequent and Mauthner gives a gloomy prognosis especially in the cases of cen-

tral and nuclear origin, which are frequently the forerunners of serious affections of the central nervous system.

If we compare the syphilitic ocular lesions, which are caused by acquired lues with those due to the inherited, we find a fundamental difference in the tissues of predilection. In the former it is the iris and ciliary body, in the latter the cornea. On the one side the tissues, which are the richest in regard to blood supply, on the other the tissue with the poorest, being normally devoid of bloodvessels. In the former we have quite acute inflammatory processes, the latter are characterized by the want of such and by an especially chronic and tedious course. This difference is certainly due to a certain change, which the syphilitic virus has undergone by the transference from one generation to another. As it seems now the long sought for specific cause of syphilis has really been discovered by Schaudinn and Hoffmann in the "*Spirochaeta pallida*" and the presence of it, in acquired as well as inherited lues, has since been confirmed by quite a number of independent investigators. If this discovery should prove to be true, further investigations and an increased knowledge of the biology of this microorganism, will in all probability throw more light upon this interesting diversity between the lesions of the acquired and the inherited form.

#### DISCUSSION.

Dr. F. L. Henderson:—This contribution of Dr. Barch's is very valuable, particularly as regards its



statistics. However the statement that syphilis is found in 2 per cent. of all eye diseases struck me as below the mark. Most oculists will agree with me that more than 2 per cent. of their cases are due to syphilis. The oculist should be a syphilographer for this reason. Wilmot, of Stockholm, gives the percentage of cases of blindness from syphilis as 17 per cent. When in doubt as to the treatment of inflammatory eye conditions, I generally institute syphilitic treatment. I have had recently several cases that tend to justify that course. Last week I had a physician come to me with an iritis. He scouted the idea of their being any syphilis in the family. I pushed the treatment with anti-rheumatics but the pain increased; I changed to inunctions of mercury and gave internally the protoiodide and in twenty-four hours the pain was relieved. The presumption here is certainly in favor of a syphilitic origin. I also had a little child recently, whose mother was a large, well developed, handsome woman, and the father scorned the idea of syphilis, though the child had an interstitial keratitis. I put it on antisyphilitic treatment, however, with excellent results and in about a month I found that there was also a hyperkeratosis of the tibia. I recall another case, that of a lady in whom the lower eyelid puffed out to an extraordinary degree when she looked up. It was a marked case of tarsitis. There was no history of syphilis but it disappeared entirely under iodide of potassium. The husband afterward manifested symptoms of locomotor

ataxia. In retinitis pigmentosa I would suggest as a means of differential diagnosis, that in those cases due to syphilis it is generally monocular while it is binocular in the nonspecific cases. Also central vision in true retinitis pigmentosa is good to the last, whereas in pigmentation of the retina due to syphilis central vision is usually defective.

Dr. Joseph Grindon:—What proportion of the cases are nonsyphilitic in origin?

Dr. Henderson:—Statistics state 50 per cent. but I think that is too low. I could not state just what the percentage of cases would be; not nine-tenths, perhaps, but I am in the habit when at all in doubt, of starting them on syphilitic treatment.

Dr. John Green, Jr.: I was particularly interested in Dr. Barck's statement as to the late occurrence of interstitial keratitis. I have recently had under observation a young woman of 31 who presented a unilateral keratitis. I did not at first suspect hereditary syphilis. On examining the teeth I found three instead of two upper central incisors, but the middle one was a gold tooth. I called in a dental friend who promptly plucked out this gold tooth, which had been inserted for cosmetic purposes because of the extraordinary separation of the natural incisors. The teeth presented the typical Hutchinson appearance. Keratitis finally developed in the other eye and was controlled only by general antisyphilitic treatment. Dr. Barck spoke of syphilitic periostitis of the orbit simulating orbital tumor. I observed a case of



this character at the Female Hospital. There was a nodular tumor at the upper inner angle of the orbit seemingly attached to the bone and producing considerable exophthalmus. On examination with the ophthalmoscope there appeared marked evidence of obstruction to the return of venous blood from the retinal vessels. I desired to make an exploratory incision and get a piece of the growth for histologic examination, but the patient declined to submit to any operative interference. The patient was given potassium iodide, finally receiving the enormous dose of 208 grains three times a day. The tumor shrunk little by little and when she was dismissed at the end of six months there was complete restoration of facial symmetry.

I believe Dr. Barek failed to mention "gumma of the cornea." This is extremely rare—but undoubted cases have recently been reported by Vinsonneau and Terson.

Dr. J. F. Shoemaker:—The ocular manifestations of syphilis may be called legion. I understood the essayist to say that the majority of ocular paralyses were due to nuclear lesions. Exception may be taken to this statement, as syphilis at the base of the brain is a rather frequent occurrence, and during recent years even those cases in which the lesion had been positively located in the nucleus have been shown, in several instances, to be due to basilar trouble.

Dr. Chas. J. Kipp, about three years ago, reported a case where all of the extrinsic muscles of one eye were paralyzed but not the intrinsic.

This is not altogether uncommon, but heretofore it has been assigned to a nuclear lesion. Even so good an authority as Henry D. Noyes says these troubles are always nuclear. Dr. Kipp's case is interesting because some of the symptoms pointed to a lesion other than in the nucleus. There was severe pain over the right eye which lasted more than two months and the patient became entirely blind in this eye. She was treated with potassium iodide and during the treatment there developed ptosis, and later complete external ophthalmoplegia, but the intrinsic muscles were not affected. Under the treatment the paralysis cleared up entirely but the loss of vision was permanent, there being complete atrophy of the optic nerve. Kipp made a diagnosis of gumma or gummatous meningitis just back of the orbit. The patient died and at autopsy there was found an organized blood clot encircling the third nerve near the dura. Microscopic examination of sections of the nerve showed the fibres all destroyed excepting a few in the center. This would seem to show that the fibres supplying the intrinsic muscles of the eye are in the center of the third nerve and that the greater part of the nerve can be destroyed by pressure and still these fibres escape. These cases suggest that we probably locate a good many lesions in the nucleus that do not belong there.

Dr. Julius H. Gross:—It is always very difficult to trace the fact of syphilis in the parents and the practice of most oculists is to treat such cases as being due to hereditary syphilis. I would like to ask Dr.

Barck whether judging from his personal experience, he does not think that the percentage of interstitial keratitis due to congenital syphilis is not larger than 50 per cent. From my experience I should say that the percentage is much larger than that. The percentage of non-specific primary iritis, in my experience, is very small. Not more than five cases out of every hundred are nonsyphilitic.

Dr. J. C. Murphy: In days gone by I treated all sorts of cases, including eyes, and one day about ten years ago a Chinaman came to my office with a typical iritis, affecting both eyes, his vision was practically nil. I was told when a student that whenever I had an eye case and did not know what to do for it to give anti-syphilitic treatment, and in that case I followed the advice. I gave him protiodide of mercury,  $\frac{1}{8}$  to  $\frac{1}{4}$  of a grain three times a day, and the vision was restored. Following my success with that Mongolian I had nineteen others, they all had iritis, many were practically blind, they all received specific treatment and they all improved. So I could say that ten-tenths of the cases in my experience were specific.

Dr. J. C. Buckwalter:—At the present time I am treating a case in which I have made a diagnosis of gumma of the iris. The nodule in the upper half of the iris is of a brownish red color and about half as large as a pea. The patient has had syphilis for six months and the nodule is a typical picture of gumma of the iris as described by competent observers.

Dr. Barck, in closing: Statistics

can only be taken with a certain degree of reserve. I have given a large number of statistics and have frequently stated to what an enormous extent the statistics differ, and I have usually given the lowest percentage. For instance one writer states that 16 per cent. of all blindness is due to syphilis. Blindness is relatively more frequently caused by syphilis than eye diseases in general, because syphilitic affections are severe affections. As to the general statistics, the frequency of eye diseases due to lues is given from 1 to 6 per cent. This depends upon the material. The highest percentage is given by authors who draw their material from places where there are many luetics. For example, Alexander, who takes his statistics from Aachen, the "Hot Springs" of Germany, finds of course a larger percentage of cases as due to syphilis, than others. As to iritis, the statistics from Paris gives 75 per cent. of the cases as due to lues, Paris being a city where lues is frequent. It seems to me that in our city not much more than 50 per cent. of the cases may be said to be due to syphilis. As to retinitis pigmentosa, I have mentioned the difference in the appearance of the fundus. I think the two conditions can always be separated. Retinitis pigmentosa always affects both eyes and in those cases where but one eye is affected, it is safe to exclude it. Cases of retinitis pigmentosa, where the central vision is normal, are exceedingly rare. The statement that in isolated paralysis of the intrinsic muscles nearly always a diagnosis of nuclear paralysis can be made, is

confirmed by a number of autopsies. While we do not know exactly where the orbital center of these muscles is located, we know the paths from the nuclei towards the cortex. There the nerve fibres are running together in a bundle; and so of course peripherally from the nuclei in the optic nerve. Whilst the possibility can not be denied, it is at least improbable, that any disease should select in the motor oculi nerve just the fibres going to the intrinsic muscles and leave the extrinsic ones perfectly intact, or *vice versa*. This same reasoning applies to the nerve fibres centrally to the nuclei. In the nuclei themselves the centers for the different muscles are distinctly separated, lying one behind the other in the following order from upward down: Ciliary muscle, sphincter of iris, extrinsic muscles. A limited

affection, as for instance a small hemorrhage or softening, may destroy one of these nuclei, leaving the neighboring ones intact, and a number of such findings, post mortem, are on record. We are mainly indebted to Mauthner for the scientific sifting of these cases.

Put this first of discussion

Dr. Henderson:—In regard to retinitis pigmentosa, the points I mentioned were merely mentioned as points of differential diagnosis. If I said central vision was retained to the last I did not properly express my meaning, I intended to say that central vision was the last retained. We all know that the ultimate result is blindness. I will repeat that syphilitic condition resembling retinitis pigmentosa, is often monocular while true retinitis pigmentosa is always binocular.



## ARE WE NOT CONSERVATIVE IN REMOVING BONY STRUCTURE IN THE FOOT TO FAVOR DRAINAGE IN SEPTIC INFECTION.\*

BY J. F. MENESTRINA, M. D., ST. LOUIS.

All who are familiar with the complex anatomy of the foot and the difficulties arising in the attempt to properly drain this area in phlegmonous conditions involving bone, can bear me out, that the ordinary method of free incisions and drainage is not sufficient for the purpose but it is often necessary before obtaining mastery of the infection to remove one or two metatarsal bones and, in formidable cases, some of the tarsal.

It is incredible how apparently insignificant abrasions of the skin can be responsible for such fearful involvement of fascias tendons, articulations, synovial cavities periosteum and bone. The infection travels from the cutis usually on the dorsum through the hair follicles leading to a formation of typical furuncles, and on account of the loose arrangement of the longitudinal and loose subcutaneous connective tissue its phlegmonous affections present characteristics similar to other subcutaneous phlegmon. On the plantar aspect, however, its invasion depends on the anatomical peculiarity of that locality. On the toes we find short thick fibers in a dense network. These enclose a number of acini of fat going from the skin direct to the periosteum or to the sheath

of the tendons to which they are closely attached. The lymphatics run about the same centripetal course of the connective tissue. This explains why such extensive tendon and bone necrosis takes place so rapidly. The rigidity of these dense structures, the great tension due to the subcutaneous connective tissue arrangement, favors the downward progress of the infection. The sheaths of the flexors of the big and little toe communicate openly with the common plantar bursa through which all the flexor tendons of the toes pass. Hence, pockets of pus accumulate in this bursa and this peculiar anatomical arrangement is to us of great practical importance in directing our early plantar incision. In the sheath of the 2d, 3d, and 4th toe flexors, we have a different arrangement. Instead of communicating with the plantar bursa they have separate and closed receptacles which terminate with the metatarso-phalangeal joint. The tendons possess no sheath proper for a short distance beyond these sacs, but are immediately enclosed by loose connective tissue. Infections originating in these toes often open spontaneously, where the blind end of the closed tendinous tissue coincides with the thinnest portion of

\*Read before the St. Louis Medical Society, January 20, 1905.

the plantar aponeurosis. This should be borne in mind when early incisions are made in infections originating in these toes.

If case is seen early enough, proper openings in this region and drainage will suffice, but if delay or hesitancy is displayed or the old time practice of poulticing is employed, bone necrosis is inevitable. It is this particular kind of infection I wish to make the theme of this paper as it represents a frequent occurrence, where a number of limbs are lost through the indecision or want of energetic action on the part of the surgeon. In a few of my cases where practically every bone in the tarsus and metatarsus were involved I deemed it necessary to completely disarticulate the 2d or 4th metatarsal bone to provide good, roomy space for the drainage of the anterior portion of the foot. A counter opening on the plantar surface from heel to toes gives access to plantar bursa, where pus is usually found. It is also receptacle for the drainage tubes. From this incision practically you have control of the tarsal bones and any necrotic mass can be curetted and drained. Counter opening at both malleoli and a drainage tube to plantar incision is also possible and peremptory. Lower end of tibia and fibula in these virulent infections are not always free from necrosis, and frequently I find it necessary to reach them by incision parallel to the tendo Achillis.

I herewith report a case of unusual interest with the general involvement of practically every tendon, articulation, synovial cavity

and bone in the foot and where it resulted in recovery with a fairly sound foot.

A. R., age 28 years; Italian; bartender by occupation, was admitted to Protestant Hospital June 9th, 1905. Previous history: 8 years ago had a severe attack of typhoid fever with several relapses. He recovered. Five years ago he sustained a lacerated contused wound of the dorsum of the foot from a fall from a horse. It apparently healed but since has repeatedly opened and closed. In March last a fresh injury to the same locality was allowed through negligence to become infected. He always led a dissipated life and his impaired condition of health and consequent lack of resisting power to microbic invasion made possible a virulent type of infection. No history of syphilis. Previous to his admission to the hospital he had been treated for two weeks by another surgeon, who subsequently directed the case to me. He had freely opened dorsum of the foot and attempted drainage. When first seen his foot was swollen, edematous, angry-looking. His subjective symptoms were very distressing; high fever and intense pain being present. On microscopical examination streptococci were found. He was partly delirious, showing a profound form of infection. He was ushered to the operating room at once and anaesthetized. Incisions were enlarged and I observed then that practically every tendon, articulation, bursa synovia and bone were a part of the general suppuration. A free incision was made in the plantar aspect of the foot from



heel to toes, taking great care not to divide plantar arches and nerves. From above I pushed aside extensor tendons and removed 2d and 4th metatarsal bone and forced through each gap two stout drainage tubes to plantar incision. In the procedure I encountered a pocket of pus beneath deep plantar fascia. The under surface of the os calcis was found necrotic and was curetted almost to a shell. Other tarsal bones received the same treatment, though more superficially involved. Tibia and fibula were reached by an external incision parallel to tendo Achillis. This was drawn aside and lower end of these bones also curetted. Two more incisions were made beneath malleolus and a drainage tube was passed through to plantar opening, making a total of *six* large drains coming through this incision. Soft tissue were sub-drained with iodoform gauze, moist dressings were liberally applied, foot was elevated, and he was placed in bed. Hypodermoclysis of normal salt solution were given him every four hours in axilla in conjunction with strychnine and sustaining treatment. Pain was mitigated by hypodermics of codein phosphate. Other pockets formed from day to day but were promptly opened. In a week's time case assumed a different aspect. Delirium ceased; pulse and temperature were very much improved, swelling subsided and infection was conquered. Four weeks later most drainage removed. Healing was complete in two months' time.

I consider this case very remarkable and instructive. It was only the most energetic and wholesale

hacking and removal of bone that made possible perfect drainage and subsequent repair. This may at first not appear as conservative work. But, as the result herein shown, we may claim it and justly so. One may ask in what shape is a limb left treated or mistreated in this fashion, after infection subsides and healing takes place? To be sure, you must not expect a perfect elastic foot. Ankylosis takes place in every joint affected by suppuration. This is inevitable. Intervening space made by the removal of the 2d and 4th metatarsal bone fills up with fibrous tissue that gives firmness to the foot. Circulation is for a time impaired. Hypersensitive areas are frequent in the line of cicatrices. Local anaesthesia is also unavoidable, due to division of cutaneous branches of nerves; but all these conditions are gradually improved and patient is left with a limb fairly useful, and lives. When we consider that many limbs and lives are sacrificed yearly by delay or lack of aggressive methods, I feel we are justified in calling this conservatism.

I observed that after injuries to bones and in the lower extremities particularly, atmospheric changes in spring and fall are perceived by these patients sometimes days ahead. I am unable to account for this human barometer unless it possibly be explained on the hypothesis of the changes in atmospheric pressure. The normal pressure of the atmosphere is sufficient to support a column of mercury about 30 inches in height, which is equivalent to a pressure of about fifteen pounds to the square inch. Now, at the ap-



proach of a storm, the mercurial column may be shortened to the extent of ten or twelve per cent., which would indicate a change of pressure of about one and one-half pounds per square inch, less than normal, and it is just at this time that the pain is most pronounced, that is at the approach of a storm but before it has begun. Scar tissue being very unyielding in texture and usually entirely unsupplied with pores, adapts itself to change of pressure very slowly and imperfectly especially so as the muscles of the part have been displaced by the cicatrix. When a change of pressure in the atmosphere equivalent to one and one-half pounds occurs, the whole body through the medium of the pores in the skin adapts itself to the change; not so with the scar tissue however; it adapts itself very slowly to the change and we have a pressure from within of fifteen pounds and from without of thirteen and one-half pounds, which causes a swelling of the part, a hyperemia, attended with pain, and in such a case as this one, where there is a scar surface of about sixteen square inches, it would be equivalent to a twenty-two pound weight lying on the foot.

The pain is described as of a boring, lancinating or gnawing character. In dry, cold or warm weather these people rarely if ever complain. I observed, also, that the normal convexity of the cavum of the foot is partly lost, after recovery, and I direct these patients to have a steel plate made, such as are in use for flat foot, and the arch gradually in-

creased from week to week.

In conclusion, I would urge prompt action in this class of cases if same are seen early enough before deep destruction takes place. It is well to remember to treat the most trivial skin lesions, strictly antiseptically as from this source the deeper lesions surely develop through the route above described. In lesion of the big and little toe, open plantar bursa at once. When the other three are involved, open at metatarsophalangeal articulations where plantar aponeurosis is thinnest. In involvement of tarsal bones, don't hesitate in providing free access by adequate incision in plantar surface. You will be surprised how many limbs can be saved by thoroughly curetting os calcis, the most frequently involved of all bone in the tarsus in these desperate cases. Do not omit lateral counter incision and superficial drain, and, above all, provide good opening by the removal of the second and the fourth metatarsal bones.

#### DISCUSSION.

Dr. John C. Morfit said just so much of an organ should be sacrificed as is necessary. Drainage was absolutely necessary, and the surgeon was not conservative in removing a bit more than was necessary for that purpose. The foot, surgically considered, was one bone. In amputations and in septic conditions it was treated as one part, as much being saved as possible, while sacrificing as little as was necessary.

Dr. Robert M. Funkhouser said one question that confronted the

surgeon in all these deforming operations upon the foot was how much could be taken away and yet insure a useful member. The main object was to get rid of the sepsis, but in the progress of the trouble it might be found that by taking away a part of the bone, though the parts would heal, a subsequent operation would be necessary to give good function. After removing a part of the os calcis, the scaphoid or the cuneiform bone, it might be necessary to do a secondary operation.

Dr. Norvelle Wallace Sharpe said that anyone who had been obliged to establish draining in cases of this character would agree that at times it became necessary to remove any structures that might stand in the way of its successful accomplishment. In regard to the unmodified

statement that, "a joint that was not drained became ankylosed", he suggested that the character of the infection and the degree of involvement of the joint structures must be taken into consideration; for an infected joint, not drained, does not invariably become ankylosed.

Dr. Menestrina, in closing, said that he wished only to make a plea for conservative work. He asked if any one present had any experience in tubercular work, where the removal of bones had been necessary, and what results followed such operative procedure. In reply to Dr. Sharpe's statement that a joint might not become ankylosed following suppuration he contended that where such destruction of articular surfaces were present as in this case, ankylosis would always follow.

## THE DUTIES OF THE PRACTICING PHYSICIAN TO THE GENERAL PUBLIC, IN INFECTIOUS DISEASES.\*

BY A. S. BLEYER, M. D., ST. LOUIS.

When this subject, "The Duties of the Practicing Physician to the General Public, in Infectious Diseases" was presented to me, I was unable to determine clearly just what was expected. As it appears to me, the subject is almost illimitable, there is so much, so many things that constitute duties for the physician to the public in the infectious diseases. It was necessary therefore to find some arrangement which would permit, in the space of a few minutes to convey my conception of those requirements which are of rather higher importance.

It occurred to me that the least confusing—the most clear arrangement, would be to make of the subject, two grand divisions, namely; the duties of the physician in infectious diseases before or without the appearance of a previous case, and, secondly, the duties of the physician after the appearance of the infection.

The first part of the subject therefore would properly deal with sanitation; the control of our dairies, of our water and ice supply, the preservation and handling of food-stuffs, the ventilation and cleansing of public places and conveyances; it would concern itself with immigration, with travel, with all matters

pertaining to social intercourse, and with the occupational diseases.

Plainly, it would be impossible to enter with any degree of thoroughness into all of these subjects, and furthermore, it would perhaps not be in my province to do so, at this meeting. I will take the liberty however, of commenting briefly on them and will confine my remarks to the necessity of a more mediate and effective control of our dairies, and to the necessity of the adoption of certain standards for the ventilation of public places and conveyances.

The second division of my subject will demand a word concerning the infectious diseases, the manner of their propagation, of their control. To this subject, I will return later.

Just how much the control of dairies lies in the hands of practicing physicians is a question rather of personal than professional anxiety, since the state should institute proper watchfulness over them, and afford sufficient protection.

It is of interest however, if not so much to the general practitioner as to the pediatricist, to be as well informed as he may about the source and character of the milk that he is prescribing for his patients, and above all, in this connection, its pur-

\*Read before the St. Louis Medical Society, February 10, 1906.



ity, its freedom from the group of bacteria constituting the subject matter of this evening's discussion.

That outbreaks of scarlet fever, diphtheria, typhoid and dysentery have been traced to dairy milk does not need here be authoritatively quoted, they have been almost frequent. (Eyre, *Brit. Med. Jour.*, Sept. 2nd, '99.)

Infections by bacilli of the coli group, and by tubercle bacilli, have yet not received their full appreciation.

Tubercle bacilli have been found in the milk of cows without tuberculous disease of the udders, and without any symptoms of tuberculous except a positive reaction to the tuberculin test. (Rabinowitsch and Kempner, *Lancet*, Sept. 28th, '01.) (Ostertsg. Adami and Martin.) Such milk is infectious, and may, under certain conditions be the source of a tubercular process in the infant taking it. About the correctness of this, there is no longer any doubt.

It is a common observation among dairymen, that the finding of a tubercular cow in a herd, suggests the early appearance of later cases. I should imagine roughly that in this country, from 15 per cent. to 20 per cent. of all cows are tubercular. Nathan Raw of Liverpool, states that from 19 per cent. to 40 per cent. of all cattle in different parts of England are tubercular. It is also claimed by scientific dairymen, that there has been a decided increase in the number of such cases during the past fifty years.

It is surprising, however, to note the degree of carelessness now ex-

ercised in this connection. Last week, during a conversation with an accredited veterinarian in Illinois, I had occasion to learn that attention is no longer paid to tuberculosis in cattle in his vicinity; tests are no longer made, and the matter is considered without importance; such cows are not removed from the herd.

Staphylococci, streptococci (Ward) and many saprophytic bacteria have been found in milk coming from cows suffering with a mastitis, and indeed, were present long after the mastitis had disappeared (Ward, Lameris and van Harreveld).

Besides these, and other highly infectious organisms that may come from a diseased animal, there is likewise an endless group of pathogenic and non-pathogenic bacteria that are always found on the premises of unclean dairies. These bacteria produce deleterious changes in the milk, and are also frequently the cause of grave gastro-intestinal infections in the infant. So-called non-pathogenic bacteria when present in great numbers in milk, become virulently pathogenic, either through their action on the milk, or by intestinal inoculation.

Later contamination of milk during shipment, either by new infectious organisms, or by multiplication of bacteria already present in it, depend upon the way in which it is handled and transported. There are good laws governing these matters in this state, and their enforcement is being executed today in a far better manner than was formerly done.

We have not however by any

means reached the position that should be held, if we are ever to eliminate even in degree, this great menace to the public.

It will be the duty therefore of the physician, to take a part in the reorganization of our dairies. Our local dairies are for the most part in a really deplorable condition, colon bacilli are repeatedly found in the best milk that we receive, and the bacterial counts frequently reach millions per cubic centimeter.

There could be no wiser means of controlling the management of our dairies than to establish a fixed bacterial standard for all milk brought into St. Louis.

It would furthermore be a highly just and far-reaching policy, to demand that all dairymen be placed under bond, for the purity of their milk.

With or without such a policy, it is certainly the duty of the physician called into attendance upon a case of infectious disease to inquire into the source of the milk-supply, and to make a report to the health officers concerning it. If this were systematically done, many outbreaks of such diseases as scarlet fever, diphtheria, typhoid, the dysenteries and gastro-intestinal infections might be accounted for, and a very great menace to the public removed.

I would furthermore recommend that the health department have a space reserved on the blank-forms intended for the reporting of infectious cases, in which the physician would be expected to fill in the name of the dairy from which the milk supply was obtained. There would

be no accusation involved herein, any more than there is in our present system of reporting the name of the school last attended.

If you will allow me, I would like to say a word concerning the subjects of ventilation and cleansing of public places and conveyances. Much has been done in this direction during the past few years, due in great measure to the aggressive action of many members of our profession, in the matter of the control of tuberculosis. Much however remains to be done.

The cleansing of public places, now that our ordinances have taken the salutary step of abolishing promiscuous expectoration, resolves itself largely into a question of ventilation. The control of infectious diseases with this help, has become vastly simplified, for it is undoubtedly true that over-crowding, stagnant atmosphere, and heat are the most effective means of furthering communication of any infectious disease from one person to another. It is quite unnecessary to insist at length upon so well recognized a factor. We have always had examples thrust upon us of such cases.

I would like to have found some scientific data on which to support this ancient fact, but very little new work has been done on the subject, perhaps because of the fact that many of the infectious diseases have not yet revealed their specific organisms.

In dealing with the question of ventilation, it is first necessary to agree at least arbitrarily, on what constitutes a vitiated atmosphere. A standard must be taken, and a ra-



tional basis conceived on which to formulate it.

Because of our lack of knowledge as to what actually constitutes the organic respiratory products, and because of our ignorance of the nature of many infectious elements, all authorities agree that a determination of the percentage of carbonic acid would give us a fairly accurate index as to the condition and the amount of impurities of all sorts that such air contains.

Pettenkofer, who has done perhaps more work in this field than others, suggests a maximum limit of 10 volumes per 10,000 volumes of air, for all public places. De Chaumont thinks that 2 volumes in excess would be a safer limitation. Anderson and Haldane propose a limit of 13 volumes for school-rooms and 10 volumes for sleeping-rooms.

A committee organized in London, to determine what should justly constitute a legal maximum of vitiation, decided that for factories and work-shops, 12 volumes in excess by day, and 20 volumes by night would greatly and sufficiently improve the conditions now existing. The health office however took exception to this decision, claiming that such recommendations were too lax, and that a standard of limitation of 9 volumes of  $\text{CO}_2$  per 10,000 of air in all places should be established, i. e., an excess of 5 volumes to the ordinary outside air.

This, it seems to me, is altogether just, and could quite easily be obtained, at the expense of a little more fuel for heating in winter, and the adoption of some system of ventilation which, if regularly and

carefully executed, need not be expensive. Barwise has shown that bad ventilation is exceedingly wasteful, and that improved ventilation more than repays itself by increased grants to schools and increased output from work-shops.

Lyon, of London, places the cost of mechanical ventilation in factories, at twenty cents per thousand individuals per hour. This, of course, may not have any application in this country. Mechanical ventilation has superseded natural ventilation wherever it has been tried. It is plain, that wherever possible, heating during the winter months has been done at the expense of ventilation.

The conditions actually present in our street cars, may be estimated from a recent inquiry made into this question by the health department of New York (Soper, *Med. News*, Apr. 19th, '02), where it was found that carbonic acid gas was present in percentages ranging from 26 to 31.2 per 10,000.

Haldane (*Brit. Med. J'l.*, Aug. 13th, '04), found in the schools throughout Scotland, a percentage of from 17.5 to 35 volumes of  $\text{CO}_2$ . In factories, this mounted frequently as high as 40 and 45.

That street cars are ridden with pathogenic bacteria, was pointed out by Hance (*N. Y. Med. Rec.*, Feb. 13th, '97.) Dyar (*Am. Annals N. Y. Acad. Sciences*, May '95), and Frith. (*Studies from the Dep't. Path., Col. P. and S. of N. Y.*, Vol. 7.) It will not be necessary to further elaborate these matters.

I will hurry on to the second divi-



sion of my paper; namely, the duties of the physician after the appearance of the infectious disease.

The problem here, that will demand attention is, of course, above all, *isolation*; and I would like to spend a few moments in discussing its most important laws, and then point out their applications in some of the more prevalent and dangerous of the infectious diseases.

By isolation, I do not mean isolation of the patient only, I mean isolation of the patient and of everything that comes into proximity to the patient, of everything that comes *from* the patient. Isolation not of the individual but of the disease, isolation of the contagium of the disease.

To isolate a disease, we must first be able to isolate the source of the contagium of the disease—the patient.

The second rule will be to so govern those in attendance upon such patient that they may in a sense preserve each an individual quarantine, the laws governing which will have to be yet more strictly enforced upon those who must retain their own freedom of person.

The third phase of the subject concerns the watchfulness over the patient after the end of his disease, when he may still remain a source of danger to the public, because he continues to carry about with him, infectious materials.

*Firstly*, then, our rule will be isolation of the patient, this must be done at the earliest possible moment when the disease has been perhaps only suspected. We are not prepared to say whether the infectious

diseases are communicable or not during the stage of their incubation, they had best therefore be isolated at this time. This might be termed the "Observation Stage of Isolation."

*Secondly*, as to such of the patient's surrounding objects as may have to be removed from the isolation chamber, and as to his attendants, we have to deal first with the physician. I would urge that the use of gowns and caps be never neglected, and unless gowns and caps be immediately sterilized after each time used, I would recommend that two gowns and two caps be made use of, simultaneously, since the gown worn exteriorly would not afford much protection to the physician's clothing after the first time it had been worn. Secondly, gloves should be worn when applications to the throat or any treatments are necessary. Thirdly, the physician should not wear a beard. Lastly, comes the matter of the physician's shoes; Wright and Emerson found diphtheria bacilli on the shoes of three nurses, in the Boston City Hospital. Denny and Nyhen (*Bost. M. and S. J.*, Dec. 29th, '04) inoculated the soles of their shoes with cultures of bacillus prodigiosus, and obtained the following results: Of 15 inoculations made on the side of the sole, 11 were positive after 72 hours. Of 26 inoculations on the instep, 58 per cent. was positive in from one hour to nine days. Of 22 inoculations on the under surface of the heels, 12 were positive after from one to three hours.

These tests show us that we may carry infectious material in a dry

state on our shoes for even long distances, and the matter assumes added importance should the physician visit children and perhaps enter their own room, where the floor is their play-ground.

It is necessary then, that the physician either disinfect the soles of his shoes, or wear over-shoes while in attendance on infectious cases.

This leads me to a last word on this subject, the physician's thermometer. I have seen very good men in attendance upon cases of measles and whooping cough, after taking a mouth temperature, replace the instrument in its case without any disinfection. The most that is usually done in the average suspected case, is to have the thermometer wiped off with a moistened towel. I consider this a serious dereliction of duty.

Bardy, a French pharmacist, has constructed a sterilizable clinical thermometer, which is, unfortunately quite cumbersome. It has excellent features however, and for hospital purposes at least, will find a position of value.

After the physician, comes the care of the nurse and the other attendants. I will dismiss this subject with this statement, that no nurse or other person should leave the isolation chamber without performing as thorough a disinfection of her hands as that required in the surgical operating room. She should bathe, change her clothing and her shoes and should certainly disinfect her hair. A mild alkaline spray of the naso-pharynx is advisable to facilitate the elimination of any inhaled bacteria.

As to disinfection in isolation, it must be aggressive. The time to disinfect is whenever anything that has been contaminated is available for disinfection. Disinfection must be hourly, and all-seeing. To wait until the patient has recovered before doing this, is unscientific.

As to the *third* part of the subject of isolation, the question involved is largely one of time, sufficient time for the complete disappearance of the infectious materials from the patient's body. This, in scarlet fever, may run into the second, third or fourth month, and depends rather upon the conditions of the mucous membranes than upon the condition of the skin, usually by the end of the second month the desquamation is complete, while a suppurative otitis, or an involvement of the respiratory system may last a great deal longer, and be highly infectious.

In diphtheria, no case should be discharged without at least two bacteriological examinations of the throat or implantation area, the second at the interval of one week after a negative report.

In typhoid fever, it must be remembered that typhoid bacilli are present in the urine in about 21 per cent. of all cases, and that when present, are usually in vast numbers, and may remain in the urine many months or even years. No case of typhoid should be discharged as recovered without a bacteriological urinary examination.

In this disease, the role of flies in its transmission must not be overlooked. Sangree pointed this out quite graphically, after the bitter experiences at Chickamauga had



awakened our attention to it. (Sangre, *Med. Rec.*, Jan. 21st, '99).

In influenza, the Pfeiffer bacillus may remain latent for several months after the apparent recovery of the patient, the infectious character of the disease is especially brought out wherever insufficient ventilation obtains; this fact is frequently demonstrated in all children's hospitals, where the occurrence of a case of grip in a ward is usually followed by the development of the disease in most all the children of that ward. In whooping-cough, we observe the same conditions, and although with perhaps less virulence, with even less disposition to disappear completely until a very long time has elapsed.

In pneumonia, bronchitis, laryngitis and coryza, infection from another patient is exceedingly common, especially in the later stages of these diseases.

Of bronchitis, Ritchie has this to say: Bronchitis is an infectious disease; the most important causal bacteria are the diplococcus pneumoniae and the streptococcus. It is patent therefore that bronchitis requires restriction, if not so completely as do more highly infectious diseases, at least sufficient for the protection of those whose business requires them to frequent crowded places.

The conditions favoring the spread of pneumonia, are very obscure. Wells believes that the increased facility for travel, and the tendency for people to congregate, may serve to account in a measure for the numerical increase of the disease. Walsh believes that it may be due to the highly infectious char-

acter of the disease and the neglect of prophylactic measures in crowded centres.

Anders speaks of the advent of epidemic influenza as being a determining factor; this is now universally conceded. He also points out the results that have followed the wanton destruction of native forests; the changed meteorologic conditions that have sprung therefrom, the increased variability of temperature and humidity.

There may also be far more importance than we have supposed attached to the augmenting prevalence of visceral degenerations, particularly of the cardio-vascular system and the kidneys. These conditions, it is known, predispose to fatality in pneumonia. Of 275 fatal cases of lobar pneumonia on which necropsies were done, reported from the Philadelphia Hospital, from Jan. 1st, '96 to March 1st, '03, (Anders, *J'l Amer. Med. Assoc.*, May 9th, '03), 250 or almost 91 per cent. presented some cardio-vascular lesion, principally, chronic endarteritis and general atheroma. Renal lesions were recognized in over 90 per cent. of these cases. These patients belonged to the pauper classes and were mostly adults.

It has been found, by inquiry into the vital statistics of New York and Philadelphia, that pneumonia in these places is more or less limited to certain centres, corresponding to denser populations, with their allied conditions of squalor and filth.

The communicable character of acute infections of the respiratory tract, especially in children has been well brought out and strongly in-



sisted upon, by Dr. Zahorsky, he claims for them, the same bacterial agents that have been described for acute bronchitis and for many of the pneumonias.

The physician owes another duty to the public, and this is, the conscientious and unfailing habit of reporting every case to the health authorities. This is a solemn duty. We are too isolated in our work for it to effect the community except through these channels. Our chief work, as practicing physicians must remain in the mind of the patient, who is, or has been sick. He must

have received his lesson from us; and it lies with him, with his own free will, to enact or leave undone, those responsible precautions that we have urged upon him.

Plainly, this is not sufficient, it offers but meager security, but it is all that the practicing physician can do, left to himself.

It is with such thoughts in our minds, that we should not fail to subscribe what help we can to the municipal authorities, whose acts are laws, and whose duties have nothing to do with the conscience of the individual patient.

## OBLIGATIONS OF THE PRACTICING PHYSICIAN TO HIS PATIENT AND THE PATIENT'S FAMILY IN INFECTIOUS DISEASES.\*

BY C. H. POWELL, M. D., ST. LOUIS.

Many intricate problems aside from actually ministering to the wants of our patients afflicted with some of the varied infectious diseases claim our most careful attention: these problems not only relate to the tendencies characteristic of the particular disease in question towards extension to more vital parts or organs in the patient, which if developed will kill, but also to adapt all the means that our experience teaches us to ward off and prevent the accession of more pernicious forces which ever tend to engraft themselves upon soil suitable for their lodgment and development. Thanks to the researches of Koch, Behring, Roux, Klebs, Sanarelli and scores of other prominent investigators our knowledge of the specific causes of many diseases of an infectious nature are better known at the present time than ever before. Diphtheria which but fifteen years ago was instrumental in carrying off a large proportion of our little ones upon whom the necessity of tracheotomy and intubation was commonplace had associated with it days and weeks of suffering; suffering characterized by septicemia and pyemia, and followed by abscesses, paralysis, deafness, Bright's disease, and many other serious conditions

was only too often brought to a sudden and fatal termination by the advent of heart failure. Fifteen years ago when this disease made itself known in a family of several children it was common practice to send the uninfected children to other homes with the ever present apprehension in our minds, although hoping for the best, that the disease might develop at other points, and such was actually the case in a great many instances which no doubt many of my audience will acknowledge. In those days we had no drug we could give, no means we could employ aside from antiseptic gargles and mouth washes with changes of clothing which when removed was thrown into boiling water or actually destroyed. Compare conditions of fifteen years ago with to-day. Diphtheria is no longer the dreaded visitor it was thanks to Behring and Roux; in antitoxin we can not only stamp out the infectious principle at once if administered early, but by the use of this subtle serum in the non-infected members of the family the disease rarely makes its appearance. The value of this remedy can be truly appreciated by those followers of Aesculapius who battled with diphtheria prior to the introduc-

\*Read before the St. Louis Medical Society, February 10, 1906.

tion of this great remedy to the profession. Consequently it is the duty of the physician to apply antitoxin in every case of diphtheria, it is imperative upon him to do so as soon as the diagnosis is made; if he is in doubt, and awaits the microscopical report, give antitoxin while he is waiting; no harm will accrue, and great benefit follow if the Kiebs-Loeffler bacillus is reported. In doubtful cases, however, I never give the immunizing dose to the other members of the family unless more than one is sickly, languid or out of sorts. If such is the case I use antitoxin on all; otherwise keep the children apart and await the microscopical report; if favorable, no immunization is required; if the contrary, antitoxin is promptly injected. In the management of this disease our obligations to our patient are: The early and immediate use of antitoxin if the case is at all suspicious or doubtful. The isolation of the patient to himself or herself. Due regard for thorough disinfection of whatever passes from the buccal cavity or other secretions as intestinal or renal. The frequent use of antiseptic sprays not only to loosen up the membrane but to keep the mouth clean. Rags or towels used about the patient should be either burned or cast into boiling water. The family should be kept away from the patient if possible and the services of a trained nurse secured: if this is impracticable who ever nurses the patient must be carefully instructed of the danger of allowing the infected patient to cough in her face and not to mingle with other children in the same

clothes worn while in the sick room.

In typhoid fever the contagious principle escapes especially from the gastro-intestinal tract, and accordingly our duty to the patient's family lies in cautioning them to employ strong disinfectants after each bowel movement not only to destroy the infectious germ in the feces but the bed-sheets in particular must be summarily dealt with as the virulent germ is always to be found on the bed linen regardless of the care employed in cleansing the patient. The utensils used by the patient should also be most thoroughly dealt with before being allowed to pass into other hands. Inasmuch as pneumonia occurs in many cases of typhoid fever often from inattention to the patient's mouth we owe him a duty to use antiseptics liberally not only to remove the sordes from his teeth but to make the mouth an unfavorable soil for the diplococcus of Fraenkel. The complications and sequelæ that are wont to occur in typhoid fever, and that can often be prevented by care, and a knowledge of the possibilities are sufficiently well known to us all; suffice to say that our duties and obligations make it incumbent upon us to be ever on the *qui vive* for action.

The knowledge we have within the past few years gained of the part played by the mosquito, the anopheles claviger, in the production of malaria or intermittent fever and yellow fever has at once given us an insight into the necessity of not only keeping these insects away from the healthy persons to prevent infection especially in yellow fever but also to prevent the insects from biting



the victim of the disease as the poisonous principle is in this manner rapidly dissipated to others whom the infected insect may later attack. In bubonic plague it is a recognized fact that the spread of the disease is attributable to the presence of rats about the premises in unusual numbers; accordingly to check the advance of the disease destruction of the rodents is in order besides the general attention to cleansing up of the premises, attention to isolation, disinfection, etc.

In Asiatic cholera which is usually communicated by the food or water employed by contamination with the comma bacillus, the specific germ of this disease, attention should be directed towards security as pertains to the source of the food used, and efficient sterilization of the water imbibed by thoroughly boiling the same to destroy any signs of germ activity. Dr. J. R. Hereford who but a short time ago returned from the Philippine Islands to St. Louis, and who had a large experience with cholera Asiatica while there advised me of the peculiar freaks manifested by the disease which in many instances would progress up the rivers instead of downstream as would be expected, and that during his stay in the service of the army as surgeon he had occasion to note two visits of cholera to

the Islands. The first visitation was characterized by certain towns being entirely skipped, not a single case developing, but when the second visitation occurred these previously exempt towns during the first visitation were the very first places where the disease broke out, and the fury with which it attacked the citizens together with the very high mortality with which the disease was associated impressed him as rather singular. Some towns the doctor stated were almost completely wiped out from the ravages of the disease. The doctor also advised me that every subterfuge was often employed by the natives to prevent the filling up of infected closets, wells, etc., rendering the work at times unusually arduous. What antitoxin is in immunizing doses as a prophylactic of diphtheria, vaccination is as a preventative of variola; accordingly should a case of smallpox break out in a family we should vaccinate every member without hesitation. In conclusion I will say that in my paper I have dealt rather in generalities as the subject that has been allotted to me by your worthy committee is a rather extensive one. It is clearly an impossibility for me to do justice to all that can be said in such limited time.

## MUNICIPAL CONTROL OF INFECTIOUS DISEASES.\*

BY C. A. SNODGRAS, M. D., ST. LOUIS.

It would hardly be proper for me to review even in a cursory manner the history of preventive medicine. Among the ancient people the Jewish ranked highest in their sanitary regulations. The Greeks did much to keep their people strong and healthful and the Romans were energetic in stamping out plagues. In modern times the English have probably ranked the highest. In our own country Massachusetts was the first state to enact laws for the prevention and control of diseases. It was in 1797 that Massachusetts gave the municipal board authority to regulate infectious diseases, but it was not until 1849 that a movement was put on foot whereby a state board was provided for and it was twenty years later, in 1869, that Massachusetts got this state board. I might hold out this experience as an encouragement to you who are working so arduously for a visiting staff to the City Hospital.

It might be well for you to ask yourselves if you have reported to the health officers of the city every case of the diseases named in ordinances. If not, then you have violated the law. From the limited number of such diseases reported by some who are engaged in general practice and working among children, one would think that their practice was confined chiefly to dysentery, cardiac diseases and the neu-

roses. It makes no difference what the law is, if every physician and every officer in this city would do his duty we would not need the shakings up we have been getting in the departments of the municipal government. It is not the law but the observance of the law that is important.

Following the report of a case of scarlet fever, for example, an officer is sent to the house, examines and placards the same, and notification is sent to the school which the children attend. The object of the lengthy record made by the officer who goes to the house is for the data we are trying to collect. The public library is also notified when a book from the library is found in the house where a contagious disease exists. After the health officer has fumigated the premises, notice is sent to the school to this effect.

In regard to the reporting of cases of consumption, the department has not pushed this matter very ardently. At first there was a great deal of objection to this ordinance, but now it is better observed and we have sanitary officers visiting these cases and collecting data for further use.

In cases of typhoid fever, until recently it was the custom to go out and disinfect the plumbing, toilet rooms, etc. Now this is left to the judgment of the physician and un-

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\*Read before St. Louis Medical Society Meeting of February 10, 1906.



less he thinks it necessary, the house is not fumigated.

In New York City the regulations regarding consumption are such that there is a general overhauling of the premises, putting on new paper, calcimining, painting, etc., and the landlord is supposed to do this work. There is a complete washing of the walls and floors with some liquid disinfectant, which is found to be more satisfactory than formaldehyde fumigation.

In this city it is left with the physician to notify the department of contagious diseases, then the department loses no time in acting upon this information. With all due credit to the health departments of other cities, I do think that the work of disinfection done here is second to none in the world. The method consists of open pots from which formaldehyde is regenerated. It is a little more expensive, costing about \$16 to fumigate a house of eight rooms. If we used wood alcohol and generated the formaldehyde with a machine it would cost about \$12. St. Louis was the pioneer in the method, and is now spending more money for disinfection than any other city in this or any other country. But you can not disinfect the throat or the surface of the body of the child and where cases have come from a house that has been disinfected it was not due to faulty disinfection but to this fact.

There are many physicians who fail to report cases of measles, whooping cough and chickenpox. The percentage of deaths from whooping cough is very high, yet little attention is paid to it. I be-

lieve the results are very satisfactory with the system as it now works but if only a few physicians report these diseases then it will be unwise to try to enforce the ordinance. Probably if the law was more severe we might get better results. A great injustice is done the conscientious physician who obeys the law. These physicians report cases and lose their practice in the families of their patients. One of our ablest pediatricists lost one of his best families because he reported a case of diphtheria, and they objected to the quarantine. I believe that the construction of an isolation hospital would be of great service. Glasgow opened in 1870 the Belvidere Hospital for fever cases and later London opened a hospital for fever cases. The South Department Boston City Hospital is probably second to none in the country. Those who designed the City Hospital here provided just such a building but that building is now being used for some other purpose. If we are able to use this building for the purposes for which it was intended it would be very efficacious in controlling infectious diseases and for teaching purposes. In an hour or two in the Boston City Hospital I learned more about infectious diseases than ever before in so short a time, when Dr. McCullum took me around with his class and showed us probably twenty cases in the various stages of intubation, explaining the details, etc. The question is, if we open such a hospital would it be taken advantage of by the physicians of the city. I think it would.



## DUTIES OF THE BOARD OF EDUCATION IN THE CONTROL OF INFECTIOUS DISEASES.\*

BY W. G. MOORE, M. D., ST. LOUIS.

When I was assigned the subject "What Should the Board of Education do to limit the spread of Contagious Diseases?" I thought it could be answered in a single paragraph, viz.: do that which the Saint Louis Medical Society requests it to do; since the board is a body of intelligent gentlemen who desire to further the interests of the city as far as lies in their power. As constituted, all the members are laymen with one exception—the exception being a physician.

I occupied for six years the same position now filled by Dr. Magoon and during my incumbency this same question came before the Board for settlement in the form of a motion to appoint physicians throughout the various sections of the city to visit the schools at regular intervals for the purposes of examining any complaining pupils and decide their fitness or unfitness to remain in the school. As I remember it, every member of that body was in favor of the plans and readily admitted its advantages; but the ever present question came promptly to the fore—"What will it cost"? and without this question being answered it was decided "we could not afford the expense."

At that time the board was struggling with inherited debt—

handed down from previous boards whose conduct had disgraced the city. This was the first elected board and was bi-partisan in politics. How well they and their successors have carried out the trust imposed in them by the people, I cite you to the number of unsurpassed school buildings and the public records of their acts. Since these improvements have been made and for the most part paid for, it would seem that a much larger fund should now be on hand for further improvements than was at our command and therefore this should be a more opportune time for presenting this question again for solution.

Before presenting it however, there should be formulated by this society a set of concise *practical* resolutions setting forth the consensus of our opinion as to the best mode of encompassing our ends.

Up to the present time the board of health has a rule requiring that each pupil in attendance must give satisfactory evidence of having been successfully vaccinated. Even this single rule gives no end of trouble to the superintendent of instruction and teachers by reason of the fact that such bodies as the anti-vaccination society and their individual adherents existing in every community object to having their children be-

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\*Read before the St. Louis Medical Society, February 10, 1906.

ing made immune to variola for their own and others safety. Then the existing belief among a large number of people that the immunity from vaccination "lasts seven years" and they refuse further vaccination until that time has elapsed and the parents alone are the computers of the time. Until one is brought in direct contact with these people, imbued with the idea that they are safe guarding their offspring against possible tetanus, syphilis and other diseases—he can not appreciate how fully Ananias and Saphira obeyed the Scriptural injunction to increase and multiply on the earth.

Physicians are often culpable in their negligence in considering the importance of the certificates they give regarding the effectiveness of scars certain children may have—many of them bearing no more resemblance to true vaccination marks than scars made from any other cause.

Another rule is that governing the return of children to school after absence on account of infectious diseases. Again the physician's certificate becomes the much coveted and all important passport to their places formerly occupied by the children in the class rooms.

Take scarlet fever for instance, than which few if any disease is more infectious and there is no fixed limit of time for them to remain away—when the questions in the printed form are satisfactorily answered by the physician in attendance. The most important of these is—"has desquamation ceased?" We all know the wide variations in the

time when this phenomenon disappears in different cases—mild and severe. What applies to scarlatina is equally applicable to other diseases of childhood and when we remember the well nigh impossibility of fixing definitely the *exact time* when infection begins and ends you readily see how difficult is the task of answering the question "What the Board of education should do in preventing the spread of Infectious Disease"? But the difficulties of the task should not deter us. On the other hand, the knowledge of the great benefits to those who are ignorant of their own dangers as well as that much greater and more intelligent number who are always obedient to the laws laid down for their safety, should spur us on to continuous exertion for the saving of lives by preventing the spread of contagion.

There are 84,333 children attending the Public Schools, 1953 teachers looking after their sanitary as well as their educational welfare. What shall the St. Louis Medical Society do to help them in their work?

First: Improve the present laws as far as possible and every physician constitute himself a committee of one to see that they are carried out in the spirit and to the letter of the law.

Second: Post a framed copy, in clear type of the laws, in the halls and other prominent places of every school in the city, that each child capable of reading them may familiarize him or herself with their provisions and carry the news home to his parents who are thus prepared to comply with them.



Third: That principals and teachers be requested to impress their importance upon the children by lectures upon the subject at stated intervals during the school term and that parents be invited to attend said lectures.

Fourth: That the Board of Education shall employ the requisite number of competent physicians to visit the schools at stated times whose duty it shall be, to use all diligence in detecting and isolating as far as possible children with infectious diseases.

I would suggest that we should procure copies of similar laws governing the schools of other municipalities of our country and take from them that which is good and make them better if possible.

#### DISCUSSION.

Dr. William H. Stauffer:—I would only refer to the reporting of those cases to the sanitary officer. I have frequently been present when the inspector called and the inspection has not always been thorough. In several cases, especially of typhoid, when the unsanitary conditions were reported they were not corrected either by the family or the agent, and later other cases occurred. There should be some law to prevent such a state of affairs and to enforce the correction of these conditions.

Dr. W. C. G. Kirchner.—Speaking of the reporting of births and the transmission of diseases to the newborn, I would like to know what the ordinances are. My impression was that the midwives treating such children should attend to the eyes.

There are at present three or four children at the hospital with gonorrhoeal infection of the eyes. This infectious disease has not been spoken of but it certainly demands attention.

Dr. John Green, Jr.:—There is a state law compelling midwives to report to a qualified physician any case of discharge from the eyes of infants occurring within a few days after birth. Dr. M. H. Post, of this city, was largely instrumental in getting this law passed. As far as I know not a single prosecution has taken place under its operation. Why is this so? Simply because the oculists to whom these cases are eventually brought have shown a shameful indifference and by refusing to report these cases to the proper authorities have connived at the continual violation of the law.

Dr. Powell:—I would like to know what experience the gentlemen have had with the Widal test in typhoid fever. My experience has been negative.

Dr. Bleyer, in closing:—From my experience in the tenement districts, I believe that it is these cases that need hospital accommodation. The statistics from New York City show that they have 670 beds for the use of infectious cases, other than smallpox; Philadelphia has 290 and Boston 700. Cleveland has 200 beds and other cities have made some provision for such patients. Baltimore is the only city that has no such provision. It is apparent that St. Louis stands low in the list, and that increased facilities for the care of infectious cases is imperative.

Dr. Snodgras, in closing:—It was this society that first advocated the



importance of changing our public water supply, and truly the better class of our profession would now be glad if disease was wiped from the land. They would fall naturally into some other vocation. As to the time of fumigation after the department has been notified that the disease has terminated, the department does not like to go behind the report of the physician, but taking for an example the case referred to by Dr. Fleming where he said he was called to see a case of scarlet fever on the fifth day of the disease, that the case ran its normal course and on the ninth or tenth day the child was well, without any disrespect to the sincerity of Dr. Fleming's question I will say that I think the department was sparring for time. We notice many such cases. Recently a doctor called for fumigation on the sixth day after the onset of the disease. In the mildest case of scarlet fever the limit is stated to be six weeks. Dr. McElwee's statement shows where the trouble lies. You ask for quarantine release too soon. Dr. Hill, of Boston, reports that four weeks was about the average time when the diphtheria bacillus disappeared

from the throat, and Holt and Roach found that to be true. As Fraenkel says, no individual has a right to go out in society when he carries infection on his person. It is true infection can be spread even through the mucous membrane after desquamation is completed. As to whether the doctor would be guilty of breaking a pledge of trust if he reported such a case of tuberculosis, as has been mentioned, tuberculosis, if an infectious disease, would go in the same category with other infectious diseases. In regard to tuberculosis the city health department is moving very cautiously. They are planning some wide innovations. Some one has spoken about scarlet fever patients running around among the general public. Light and air is what is needed, it is true, but it should be remembered that where other's rights begin the patient's rights end, and they should not be allowed to infect others. It is to be hoped that the parents will be encouraged to send their children to the hospital for infectious diseases, when one is established, for the only way to control these diseases is to isolate such cases.

## THE PRESENT STATUS OF PELVIMETRY.\*

BY HUGO EHRENFEST, M. D., ST. LOUIS.

Every textbook of obstetrics devotes considerable space to the elucidation of the rationale and the technique of the various methods of pelvimetry; every teacher of obstetrics emphasizes the manifold advantages of pelvimetry and recommends the mensuration of the pelvis as an essential part of the routine examination of every pregnant woman. And what is the result of all these energetic efforts? It is practically nil.

If it would be possible to calculate exactly the proportion of the measured pelves to the total number of confinements in the hands of physicians who have been taught the art of pelvimetry, I do not doubt, the percentage figure would be found extremely low, probably so low, that it would be justifiable to say: Pelvimetry is not practised, neither by the general practitioner nor by the obstetrician. The man, who in accordance with the suggestions of his teacher, measures every pelvis certainly is a *rara avis*.

How can this striking discrepancy between theory and practice be explained?

For some time I have tried to answer this question and I have almost persuaded myself that I have found at least a few of the reasons for this evident neglect of an undeniably useful method of examination.

Briefly stated these reasons are the following: *The term pelvimetry is misleading. Most writers make unjustifiable and exaggerated claims for the utility and accuracy of the various methods of pelvimetry. The practical importance of an exact determination of the size of a pelvis, or more correctly, of the length of one or two of its diameters is generally overrated.*

My views are based upon practical experience with almost all methods of pelvimetry and a careful study of the literature on the subject. For obvious reasons I shall refrain from giving here lengthy quotations from textbooks and papers which readily would prove the justification for my adversely critical attitude.

All textbooks define pelvimetry as the method of determining the size of a pelvis and certainly the term implies this meaning. I do not know, however, of a writer who adds to this definition the statement that we do not possess such a method.

Our most valuable methods of internal instrumental pelvimetry permit to measure solely the length of the true conjugate with a satisfactory degree of accuracy. The antero-posterior and the transverse diameter of the pelvic outlet can be determined with a tolerable degree of exactness. Modern pelvimetry is

\*Read before the St. Louis Medical Society, November 4, 1905.

thus practically limited to the mensuration of these three diameters. Roentgen-photography promised to solve the problem of determining the size of the entire pelvis, but soon it was found that the pictures were too distorted to permit a reconstruction of the actual shape and size of the pelvis. In spite of very ingenious contrivances, which of late have been suggested, the difficulties as yet have not been overcome. X ray photography at the present day is still practically valueless for the purpose of pelvimetry, although the author of one of the latest textbooks of obstetrics devotes some space even to a description of the process of developing photographic plates.

But the word pelvimetry is misleading still in another respect. With the exception of only two methods, we do not possess any means of ascertaining the length of any of the pelvic diameters with accuracy enough to justly permit the use of the term "measure" for this kind of rough estimation and calculation. Both in internal and external pelvimetry, when executed on the living, we measure the distance of ill-defined points, which are covered with a thinner or thicker layer of a soft compressible tissue. This fact alone precludes exactness. A variation in the force with which the ends of any of the pelvimeters are brought in contact with the two points, marking the diameter, will of necessity lead to variations in the results. If the same diameter is measured repeatedly, either by the same or by various examiners, the result will be a different one each time. In spite of the utmost care

these differences will amount to several millimeters, and in the mensuration of external diameters even to one centimeter. They are unavoidable. But this fact is very seldom duly emphasized by writers. Many delight in giving in millimeters the length of pelvic diameters measured in the living and some give them even accurate to the fractions of one millimeter. This is hypocrisy—to say the least—and such writers are largely responsible for the deplorable fact that pelvimetry is not as generally used by the general practitioner or the obstetrician as it should be. It must be an extremely discouraging experience of the beginner to encounter these inaccuracies in his mensurations, if he is not informed about them. We should not be surprised if he soon gives up the pelvimeter.

The misapplication of the Greek word "metron" (measure) in the word pelvimetry becomes quite apparent by a comparison of what a term like external pelvimetry suggests and what in reality it means.

When Baudeloque in 1775 devised his calipers and described his method of measuring the external conjugate, which in his honor is called the diameter of Baudeloque, he considered the problem of pelvimetry definitely solved. Smellie had invented his method of digital mensuration of the diagonal conjugate several years before, there were already instruments existing for the mensuration of this conjugate (e. g. that of the elder Stein) but Baudeloque was convinced that his external pelvimetry was the more reliable and more useful method and I am afraid



a few of the modern textbook writers still share Baudeloque's opinion.

External pelvimetry is based upon the principle, first suggested by Baudeloque, that there exists a definite proportion between the length of the external and internal diameters of the pelvis, or in other words, that by means of certain subtractions from the length of an external diameter the length of the corresponding internal diameter can be determined. This principle is today recognized as absolutely erroneous. This constant proportion does not exist, not for any one of the various diameters, and certainly not between external and true conjugate.

The points commonly used in external pelvimetry are: the spinous process of the last lumbar vertebra, the anterior superior spines and the outer edges of the crests of the iliac bones, and the heads of the trochanters, that is points which do not stand in any immediate connection with the bones constituting the small pelvis. The variations in the thickness and shape of the sacrum, symphysis, femur, etc., in the thickness of the soft parts covering the points, from which the measurements are taken, are such as to practically exclude the possibility of determining in the individual case how much the deduction should be. In the light of most painstaking investigations it seems absurd to draw any positive conclusions regard the size of the pelvis from these external diameters, but very many writers still do it. Although practically unfit for the determination of the *size* of the pelvis, external pelvimetry, as will be later shown, must be regarded a

very valuable method in the recognition of an anomaly in the *shape* of the pelvis.

One more fact may be mentioned in support of my contention that the utility and accuracy of the various methods of pelvimetry in general is exaggerated. Every textbook of obstetrics contains the well known picture which illustrates the digital mensuration of the diagonal conjugate: a median section through a pelvis with the hand of the examiner in the typical position, the thumb pressing against the outer surface of the symphysis, the tip of the middle finger resting against the promontory, the third and fourth finger folded into the palm. If you look at such a picture with the critical eye of the artist, you will easily recognize that this middle finger always is considerably out of proportion, quite hypertrophied and elongated. Of course, the artist, who draws such an illustration and the student who is enlightened by it, do not know that it is impossible to reach the promontory with a normal sized hand in a normal sized pelvis as long as there is a normal perineum present. Illustrators with artistic feeling, therefore, use for their illustrations a median section through a dried pelvis and then place the fist of the examining hand somewhere into the pelvic cavity, where it never can be placed in the living woman. This hypertrophied middle finger is a rather typical feature of illustrations pertaining to pelvimetry and kindred subjects, because it is not generally understood that the diagonal conjugate can be measured only in contracted pelves.

And what is the practical value of a knowledge of the length of the diagonal conjugate?

In order to obtain the length of the true conjugate in normally shaped pelvis a deduction of about 15 to 18 millimeters must be made from the diagonal conjugate. In abnormally shaped pelvis the necessary deduction varies between nothing and 30 millimeters according to investigations made on cadavers. This fact implies a degree of inaccuracy which would make the mensuration of the diagonalis valueless, if we would not have some means of estimating in some manner the amount of the subtraction necessary in the individual case. The experienced examiner actually learns to estimate the height of the symphysis, its inclination and the relative position of the promontory to the plane of the pelvic inlet, and from these observations approximately determines the deduction to be made from the diagonal conjugate. But of course, since the exactness of the determination of the length of the true conjugate by this method is entirely dependent upon the versatility and the judgment of the examiner the value of the method in general practice becomes limited. It should be well borne in mind that the unavoidable inaccuracy of an estimation of the length of the true from the length of the diagonal conjugate, may easily amount to one-half centimeter and more. If writers, as is the common practice, in this manner "measure," in reality roughly guess, this diameter, then speak e. g. of a true conjugate of 77 millimeters and make learned deductions whether

such a diameter necessitates the one or the other obstetric operation, they clearly transgress the limits of propriety. In my opinion they would serve the cause of pelvimetry better by speaking more modestly about a true conjugate somewhere between seven and a half and eight cm. remembering at the same time the fact that even that may be incorrect.

The danger of a positive reliance upon this method of determining the length of the true from that of the diagonal conjugate is convincingly shown by a case which is quoted in a recent article by Sellheim. He found in the pathologic museum a generally equally contracted pelvis with a diagonal conjugate of nine cm., in which the true conjugate also measured almost nine cm. This pelvis belonged to a woman who had given birth spontaneously to a full term child. If this diagonalis would have been measured before labor and the length of the true conjugate estimated by a deduction of only two cm., Cæsarian section would have seemed the only possible means of delivering this woman of her child.

I shall next take up the consideration of the accuracy of internal instrumental pelvimetry. But before doing so it seems necessary to give a brief resume of the various principles underlying the different methods which are used at the present time.

Practically all instruments designed for the purpose of internal pelvimetry can be grouped according to three principles of pelvimetry.

The first principle, the oldest one,



is that of direct mensuration. It has been invented by the older Stein and Coutouly. It comprises the pelvimeters with which the true conjugate is directly measured by bringing the end knobs of the two branches of the instrument simultaneously in contact with both the promontory and the symphysis. Such pelvimeters either resemble the shoemaker's sliding scale, or consist of a pair of bent levers, hinged together in the middle without being crossed, like the arms of a glove stretcher. A compression of the two ends on one side causes a corresponding separation of the other ends of the two arms. The latest of the numberless variations and modifications of the well known "Pelvimeter of the older Stein" has been recently described by Solowij. The principle of the sliding scale, first invented by Coutouly in 1810, is employed in Farabeuf's pelvimeter, which is described and recommended in some of the modern American textbooks of obstetrics. The instrument recently described by Bylitzki belongs to this same group.

The one chief shortcoming of all instruments which attempt the direct mensuration of the true conjugate lies in the fact that during mensuration the instrument at the same time touches both the promontory and the symphysis. The stretching of the vagina necessary for this purpose implies numerous disadvantages, among them the following: The procedure is extremely painful; the vagina may be injured and occasionally the end of the arm, destined to reach the promontory, has perforated the vagina; if the vagina is ri-

gid, i. e., in most primigravidae, the measurement obtained in this manner, in all probability will be too short. Obviously many efforts have been made to eliminate the faults of this method. The ends of the promontorial branch of the instrument have been made broad and blunt, spoon shaped or have been armed with large buttons. But such modifications lessen the precision of the instrument. In order to overcome the difficulty and necessity of stretching the vaginal wall, instruments have been constructed in which the posterior promontory branch is introduced through the rectum, and others in which the anterior branch is slipped through the urethra. It can be easily understood why these modified instruments have not been adopted for general use.

The second group comprises the instruments which measure the true conjugate indirectly by means of a principle which is known as that of into-external pelvimetry. By palpation a point is determined on the mons veneris in front of the pubic symphysis which represents a direct continuation of the true conjugate to the skin covering the symphysis. This point is marked and measurements taken from it to the promontory and to the inner surface of the symphysis respectively. This last measurement indicates the thickness of the symphysis. A subtraction of this dimension from the distance between marked point and promontory gives the length of the conjugata vera.

To Wellenbergh (1831) belongs the credit of having constructed the



first practicable instrument based upon this principle of indirect mensuration. The Wellenbergh instrument was first successfully improved by Van Huevel and later (1887) by Skutsch. The latter's instrument is at the present day probably more generally used than any other, although most American authorities favor the pelvimeter of Hirst, which is also based upon the Wellenbergh-Van Huevel principle.

The exactness of the results obtained with the various methods of into-external pelvimetry is to a very large extent dependent upon the versatility of the examiner and his familiarity with the use of the particular instrument. It is a decidedly difficult task, even with the help of an assistant, to keep one branch in contact with the middle of the promontory and bring at the same time the end of the other branch near the point marked on the skin in such a way, that it just touches the surface and does not press down the skin. If at the two mensurations, necessary for determining an internal diameter, the end knobs press against the compressible skin with a different force, the result of the measurement of necessity will be faulty. The principle of this form of into-external pelvimetry is not mathematically correct. In practice it is impossible to determine exactly where a direct continuation of the internal diameter, which shall be measured, strikes the skin, and the precision of the mensuration is dependent just upon this point.

It cannot be denied, however, that in spite of these difficulties and inaccuracies an *experienced* examiner

may succeed in determining the true conjugate within a few millimeters of its actual length.

A third and entirely new principle has been introduced into instrumental internal pelvimetry by an instrument devised by me in co-operation with Dr. Jul. Neumann of Vienna. (A detailed description of this method can be found in *Am. Jour. of Obst.*, May, 1903). The principle underlying the Neumann-Ehrenfest Pelvigraph is that of geometric projection. By means of this instrument a drawing can be obtained which pictures exactly the median sagittal section through the pelvic canal in its natural size. Like the methods of into-external pelvimetry pelvigraphy is too complicated for general use, requires trained assistance and special versatility on the part of the examiner. The Neumann-Ehrenfest Pelvigraph has, however, two decided advantages over those methods of pelvimetry which are based upon the Wellenbergh principle. The Pelvigraph is mathematically correct, and by producing an exact diagram of a median section through the entire pelvic canal it defines not only the size but also the shape of the pelvis at least in this one plane. Mention may be made of the fact that the Neumann-Ehrenfest instrument like the Skutch instrument, at least theoretically, can be used for a determination of the transverse diameter of the pelvic inlet. But very little reliance can be placed upon the result of this mensuration.

Finally I may be permitted to advance a few arguments in favor of my contention, that in general exag-

gerated claims are made for the practical value of pelvimetry, or more correctly, for the knowledge of the length of the true conjugate.

J. C. Arantius, a disciple of Vesalius, recognized at about the middle of the sixteenth century the narrow pelvis as one of the most important causes of a delay and at times of an absolute impossibility of the expulsion of the fetus *per vias naturales*. The significance of the narrow pelvis in the etiology of dystocia is to-day generally admitted. The early recognition of an existing disproportion between the size of the fetal head and the size of the pelvis has become one of the most important tasks of the modern obstetrician. It is obvious that such a disproportion can be definitely ascertained only by determining the exact dimensions of both the fetal head and the pelvis. We do not possess, however, a reliable or even practicable method of cephalometry. But even if we would have such a method we would not be any nearer the solution of the problem. If it were not for the fact that the fetal head is compressible and moulds in the course of labor, no fetal head could pass even through a normal sized pelvis. The moulding of the head is dependent upon the strength and the character of labor pains and upon certain anatomic conditions of the fetal skull, th. i. upon factors which can be neither measured nor estimated. It is obvious that labor may progress normally if in a case of contracted pelvis the pregnancy ends prematurely. On the other hand, a perfectly normal pelvis may prove too small in the presence of an abnor-

mally large head or one which is not compressible or does not mould on account of a deficient action of the uterus. If we to-day base the assumption or diagnosis of an existing disproportion between fetal head and pelvis on the ascertained shortness of the true conjugate, we leave out of our consideration the size and compressibility of the fetal head, or take it for granted, that they are normal. This practice has become general—of necessity, but has thus lead to an unwarranted belief in the importance and practical value of pelvimetry.

It is an interesting and most noteworthy fact that in the teachings of the modern obstetrician concerning the prognosis and therapy of labor in cases of contracted pelvis, practically everything is made dependent upon the length of the true conjugate. This diameter decides the choice between such operations as high forceps, symphysiotomy, hebotomy and Cesarian section. Most practitioners (and I do not mean to exclude by this term the obstetricians) have formed the opinion that the true conjugate actually is the one diameter which in cases of contracted pelvis decides the outcome of labor. This opinion obviously is erroneous. We have learned to be satisfied with a knowledge of the length of this one diameter, simply because no known method of pelvimetry enables us to measure with reliable or sufficient accuracy any other dimension of the pelvic inlet.

In my opinion just this mistaken and unjustified reverence accorded to the true conjugate has e. g. led to the inexcusable neglect of the men-



uration of the pelvic outlet, the only other plane of the pelvic canal which we really can measure. I have already stated that the antero-posterior and the transverse diameter of the pelvic outlet can be determined with a reasonable degree of exactness, especially in patients who are not very stout. The methods employed for this purpose are comparatively simple and the practical importance of a knowledge of these diameters is generally conceded. Authorities, who of late have adopted the measurement of these diameters as a routine practice, contend that contractions of this portion of otherwise apparently normal pelvis are decidedly more common than is generally thought. They often account for an unexpected difficulty in the final expulsion of the fetal head which has fully entered the pelvic cavity. As soon as physicians will be more properly and more generally informed of the fact that the contraction of a pelvis is not limited to the inlet and that the recognition of the character and degree of a pelvic deformity is not entirely dependent upon the mensuration of the true conjugate, th. i. upon a procedure which they are not expected to master, they probably will more often resort to a mensuration of the pelvic outlet.

Of course, as long as we cannot measure the size and the compressibility of the fetal head the practical value of pelvimetry or as we may say more appropriately, the practical value of a knowledge of the length of the true conjugate and the size of the pelvic outlet will remain limited. But after all, it is not alone the

actual disproportion between head and pelvis which in cases of pelvic deformities leads to anomalies in the course of labor.

A little more than fifty years ago Michaelis from very careful observations concluded that *anomalies in the shape of the pelvis* favor faulty presentations and abnormal mechanism of labor. To-day the fact is generally admitted that an abnormal configuration especially of the pelvic inlet very often is responsible for such condition as face or brow presentation, transverse position, a premature rupture of the membranes or a prolapse of the umbilical cord. It is obvious that in the etiology of such pathologic conditions only the abnormal shape and not the actual contraction plays an important role. From the point of view of practical significance the claim, therefore, seems justified that a physician first of all should be able to recognize the mere presence of a pelvic deformity. But this fact is in general not duly appreciated. We read and hear so much about pelvimetry, but comparatively little about the methods which enable us to diagnose the existence and the special character and type of an abnormal configuration of the pelvic canal.

I shall devote this last part of my paper to a brief consideration of such methods and thus find an opportunity to explain what in my opinion the true practical value of external and internal pelvimetry is.

#### (a). *Clinical History.*

The overwhelming majority of all pelvic deformities develop as the result of rhachitis, osteomalacia and chronic affections of the hipjoints.



A systematic and careful inquiry into the history of the patient will reveal the existence of any one of those conditions.

The history of preceding labors is of still greater importance in multigravidae. Several births of full term children may be accepted as almost conclusive proof that the pelvis is of normal size. No better method of pelvimetry than a normal labor at the normal end of pregnancy. In patients in whom previous confinements were pathologic and had to be terminated by the use of instruments, a careful study of the particular features of labor may permit, if not a diagnosis at least a conjecture concerning the nature of the pelvic abnormality.

(b). *Inspection.*

Although not practicable in every pregnant woman an inspection of the stripped patient in standing position should be sought for in every instance in which a pelvic deformity is suspected. The time does not permit me to enter here into a detailed consideration of the actual diagnosis of pelvic anomalies by inspection, but I can assure you that one can easily acquire the ability of recognizing by inspection anomalies in the pelvic inclination, in the configuration, position and inclination of the sacrum, assymetries, deformities of the vertebral column, etc. Such observations in conjunction with characteristic anomalies in the stature and especially in the gait often permit a positive diagnosis even of the special type of pelvic deformity.

(c). *External Palpation.*

The value of palpation in this

connection is obvious because rha-chitis, osteomalacia, and spondylolisthesis cause marked and characteristic changes in the outlines of the pelvic bones.

(d). *Manual Exploration of the Pelvic Cavity.*

Smellie in the middle of the 18th century first described and emphasized the advantages of a digital exploration of the pelvic cavity. To-day this procedure is generally accepted as the most serviceable and reliable aid in the recognition of both the character and the degree of a pelvic contraction. The careful examination of the pelvic cavity must be a part of the routine examination of every pregnant woman. Although the technique of this procedure is of paramount importance for its success, I have to omit here its detailed description. The pelvis must be explored in a systematic way. First the height and inclination of the symphysis are examined, then the pubic angle, next the sacrum, its lateral and vertical curvature, the sacro-coccygeal joint, the position and shape of the promontory, the curve of the innominate lines and so on, winding up with a digital mensuration of the diagonal conjugate, if that is possible. I cannot enter into a discussion of the significance of the various findings in the diagnosis of pelvic deformities, but can again assure you that with a routine exploration of all pelves noteworthy deviations from the normal shape are detected with comparative ease.

(e). *External Pelvimetry.*

I had occasion in a preceding part of my paper to state that ex-

ternal pelvimetry does not permit any conclusions concerning the size of the pelvis, furnishes, however, a very important aid in the detection of an existing deformity. Fully satisfied that the determinations of the intertrochanteric diameter is void of any practical value, and that practically no deduction can be drawn from the length of the external conjugate, I limit myself to a routine mensuration of the distance between the anterior superior spines and the outer edges of the iliac crests respectively.

In normally sized pelves the interspinous diameter measures between 27 and 30 cm. Such figures do not by any means indicate a normal length of the transverse diameter of the pelvic inlet. Nevertheless the mensuration of these two external diameters must be regarded as one of the most useful means at our disposal in the diagnosis of a pelvic deformity. It has been found that in almost all normally shaped pelves the intercrystal diameter is about three cm. longer than the interspinous. On the other hand, in rhachitic pelves this difference in length is so constantly reduced, that the probable diagnosis of a rhachitic deformity of the pelvis can be made whenever the intercrystal diameter is found but one cm. longer than the interspinous, or equals its length or possibly is even shorter. The inference, however, cannot be drawn that every pelvis which presents the normal difference of 3 cm. is normal in shape, because in rare instances even in rhachitic pelves this difference of 3 cm. is met with.

In a *generally equally contracted*

pelvis the normal shape of the pelvis is preserved. Such a pelvis, therefore, will show the normal difference of 3 cm. between the two diameters with a distinct reduction in the length of both, e. g. D. Sp. 20 cm., D. Cr. 23 cm.

The external mensuration of a *generally contracted rhachitic* pelvis, on the other hand, will demonstrate an absolute reduction in the length of the two diameters with a simultaneous reduction in the difference of their respective length, e. g. D. Sp. 20 cm., D. Cr. 21 cm., while in the *simple flat rhachitic* pelvis the diameters probably would be 25 and 26 cm.

A middle position between external and internal pelvimetry is held by the methods employed in the determination of the size of the pelvic outlet. It would seem advisable to take these measurements in every case.

#### (f). *Internal Pelvimetry.*

At the time of the first internal examination of the patient an attempt should be made to measure the diagonal conjugate with the examining finger. Whenever we are able to reach the promontory in the presence of a normal rigid perineum, we are justified in assuming that the pelvis is contracted in its anteroposterior diameters. If the contraction is marked, if difficulties during labor may be expected and the pelvis is symmetric, an effort should be made to ascertain the length of the true conjugate in a reliable manner, th. i. by means of internal instrumental pelvimetry. For this purpose the Skutsch, the Hirst or the Neumann-Ehrenfest instrument can

be used. Every examiner has special likings in this respect and usually is familiar with the use of but one of the instruments. In patients with a relaxed vagina also Farabeuf's or Bylitzki's pelvimeter may prove useful. It may be well to bear in mind, however, that all these methods yield reliable results only in the hands of the expert. A knowledge of the special type of pelvic deformity, and of the approximate length of the true conjugate together with a careful consideration of other factors, such as approximate size of the fetal head, the history of preceding labors, etc., will in the individual case help to decide upon the appropriate mode of therapeutic interference. The scope of this paper does not permit, however, to enter into a discussion of the practical application of the results of pelvimetry.

My adversely critical attitude toward the manner in which pelvime-

try is taught and exploited at the present day must not convey to you the wrong impression that I deny or even do not fully appreciate the value of pelvimetry. I am well aware of the fact that we owe to pelvimetry our present advanced knowledge of the abnormal pelvis, of the various forms of dystocia caused by it and their therapy. I recognize the advantage and regret the neglect of pelvimetry in every day practice. I believe, however, that this useful method of examination would find a wider application both at the hands of the general practitioner and the specialist obstetrician, if more appropriately would be appreciated just how much can be achieved by measuring certain pelvic diameters, and if writers would avoid to create erroneous and exaggerated ideas concerning the utility and accuracy of the various methods of pelvimetry.



# Journal Missouri State Medical Association

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## EDITORIAL.

### ILLEGAL PRACTICE OF MEDICINE.

At the meeting of the St. Louis Medical Society, March 3rd the Committee on Public Health and Legislation made a report urging the society to take action for the immediate relief of conditions manifesting themselves in four forms:

(1). *Obscene Medical Advertising*: Although this has been an evil of long-standing, and should have received correction under the city ordinance passed over twenty years ago, nothing has actually been accomplished until recently. The history of the King case is now pending on appeal to the supreme court of the state. As indicated by the report of the attorney who conducted that case, and who, under the authority of the society, is further attempting to prosecute the newspapers, attempts are now being made to fix the penalty of the ordinance against these papers that print or publish obscene advertisements. As further indicated in that report, the city attorney's office is unwilling to bring prosecution against all of the

papers, but the *St. Louis World* is selected as the victim which is to stand prosecution at the expense of the publisher's association for the purpose of testing the ordinance.

These prosecutions are solely matters of city and not of state action—and yet, as indicated, no action has been taken by the city attorney's office for many years to the end of enforcing this ordinance. This must be for the reason that there was no person or set of persons sufficiently interested to demand and take active efforts for the enforcement of the ordinance. The society need not consider the matter of raising funds for the purpose of securing a fee in these prosecutions, since the attorney undertook them without charge.

(2). *Practicing Medicine in Corporate Forms*: On February 10th, the society had expressed its purpose to have the attorney proceed to the end of the ousting companies practicing medicine in this state from the further exercise of their corporate franchises. Action to this end should not be delayed, in view of

the fact that individuals are being incorporated in quick succession, of late years, for the purpose of evading direct, personal prosecutions. These incorporations should be forestalled and prompt action taken for the purpose of deterring them from uniting in corporate form. There can be no doubt of the outrages perpetrated by so-called physicians united in this corporate form and availing themselves of the corporate shield. Recently the attorney was empowered by the society to go to Jefferson City for the purpose of determining the feasibility of instituting proceedings. While there a list of over one hundred and seventy-five medical companies was compiled, all of which however, are not necessarily objectionable.

Attorney-General Hadley found that his office was too busy at this time with other work even to consider the lending of his name for the purpose of issuing the writ. The matter was asked to be referred to the circuit attorney's office that it may originate from St. Louis, at the same time being a state proceeding. The city has absolutely nothing to do with such proceedings, it being a matter of general state importance and jurisdiction. Neither is it reasonable to suppose that the state office here would proceed with the matter and devote all of its time and attention to collection of evidence, presentation of the case, briefing, etc. This work should be done actually by the individuals who are urging the proceedings. It is, in short, a matter which may be properly presented and pushed to its best ends by being referred to those who may give this matter special

attention.

(3). *Midwifery*: Here are presented frightful conditions—evils which cry for a prompt and thorough correction. Information has come to your committee which confirms the notorious facts that nearly all of the practicing midwives are guilty of the crime of abortion. It is claimed that evidence of this practice may be readily furnished and if the crime exists it should be punished.

These are outrages which medical men, above all, should seek to suppress. The initiative should come from the medical profession.

Information further comes to the effect that some of these midwives conduct houses of prostitution in connection with their establishments. It is said to be a common practice, when girls from the country come to them for aid, that they require them in their earlier pregnancy to live as prostitutes, and divide the spoils of their sins to satisfy the greed of these so-called midwives. In one instance, it is said that a midwife, to conceal the traces of her crime of abortion, about to be discovered, chloroformed the offspring and burned it.

The same informant states that it is common for false reports to be turned in regarding births and deaths. In one instance especially the midwife reported a certain death from pneumonia, when as a matter of fact, both the mother and child died as result of the abortion practiced.

It is a notorious fact that at least one of these midwives is a dope-fiend and a drunkard; others of these have served terms in the penitentiary for sending matter through the mails

suggesting treatment to procure abortion, and these same midwives having served their sentences, returned to the city to continue their nefarious practices.

It is said that another one of these contracts to perform an abortion, taking part payment in cash, and thereafter performs no services at all, resting upon the defense that the contract is an illegal one and unenforceable. Many of these practice under assumed names. It is further a well known fact that most of them advertise as doctors, have signs and notices to that effect, when in truth they have no such license whatever.

These may be reached effectively only by state prosecutions. City ordinances have but few regulations concerning midwives, and are sadly deficient in this respect. The state law is broad and sweeping. Under this law they must pass examinations in obstetrics; they cannot engage in practice as physicians, and it is made a crime to advertise as such, or to have any sign indicating that they may practice as such. Here too, then, we must look to the state office to be relieved. And here again, in order to realize the best results some one person must be depended upon to give his attention specially to the working up of the evidence, presenting it in proper form, and prosecuting the cases earnestly and vigorously. It may be mentioned here that the midwives have called a meeting of their association for the early part of March, presumably for the purpose of evading or resisting prosecution.

(4). *Physicians Practicing Without License, or With Forged License*: Those practicing without li-

cense may be reached through the city office although the state law prescribes a somewhat greater punishment, but those presenting a forged license may be more effectively and properly reached through a state prosecution. They are under the state law, subject to the penalty of forgery.

In conclusion it may be said that practically all of the offenses referred to, with the exception of a part belonging to the last class, are matters more properly for state redress. But whether the matters be prosecuted through the city attorney's, or the state attorney's office, the society can not and should not depend upon the efforts of those departments if it hopes really to accomplish something and is in earnest in its efforts to purge the profession. These departments are too crowded with the many cases which, in the routine of work, consume all their time, to devote special effort toward procuring evidence, ferreting out the facts, and actively and energetically prosecuting the cases. Matters of special importance are always prosecuted at the instance of those specially interested. Witness the King case and the prosecutions against the newspapers—these were cases properly for the city attorney's office, and yet it could not be expected that this office should assume single-handed to do all the work connected therewith, while under the pressure of some hundred cases of arrests and summonses per day.

A special committee consisting of Drs. H. C. Dalton, J. Zahorsky, R. S. Holman, L. H. Laidley, J. S. Myer, J. B. Ross, J. M. Grant, W. H. Stauffer, and J. H. Tanquary



was appointed to assist the committee on Public Health and Legislation in collecting funds for the prosecution of these cases, and it was decided to push the work as vigorously as possible. The committee appeals to the medical profession of the state to send them information relating to any irregularity in the practice of medicine in the City of St. Louis. Communications should be addressed to any member of the committee, viz: C. M. Nicholson, chairman, 4500 Olive St., Robert Luedeking, 1837 Lafayette Ave., or Hugo W. Bartscher, 829 Bremen Ave.

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### THE PROGRAM.

Elsewhere in this issue will be found the program of the Forty-ninth Annual Meeting of the Missouri State Medical Association to be held at Jefferson City, May 15, 16, 17.

The first day will be devoted to the meeting of the House of Delegates and the Judicial Council. It is believed that practically all business of the Association will be transacted on the first day.

The second and third day will be devoted to scientific work, which is to be held in two sections. Besides the President's address and Orations on Medicine and Surgery, sixty-four papers will be presented. Jefferson City, because of its commodious assembly rooms, hotel accommodations and railroad facilities, should be a most desirable meeting place and a very large attendance is expected.

### AFFILIATED SOCIETIES.

The proper officers of the affiliated societies are urged to send in their reports at the earliest possible time. As yet not more than three-fourths of the societies in the state have paid dues for 1906 and it is especially to be hoped that these reports will be made without unnecessary delay.

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### A LIST OF DELEGATES.

On page 708 will be found a list of delegates as reported to the State Association by the affiliated county societies. In several instances the name of the representative of the affiliated society was not received in time for our April issue, but it will appear in our May number. The increase in the number of delegates this year is due principally to the increase in the number of societies.

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### RAILROAD RATES.

The Southwestern Passenger Association has announced a rate of one and one-third fare, certificate plan, for the round trip to Jefferson City on account of the annual meeting of the Missouri State Medical Association. It will be necessary for members to take a receipt from the agent for full fare when paid. This receipt should be turned over to the registrar at the entrance to the Association meeting hall and, when properly signed, it will be accepted by the station agent at Jefferson City for one-third fare. In

order to get the rate it will be necessary to have one hundred certificates, but as at the last meeting five hundred and twenty were registered it seems reasonable to expect at least seven hundred and fifty at the Jefferson City meeting.

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### GENTRY COUNTY.

Dr. E. H. Miller, Councillor for the third district, is to be congratulated that another of his counties has become organized and in affiliation with the State Association. The latest addition to the list is Gentry county, with G. W. Whiteley, president; J. N. Bargar, vice president; J. N. Conrad, secretary; G. N. Smith, treasurer; board of censors, C. B. F. Grantham and Edwin Lewis. Members, G. W. Whiteley, Albany; J. N. Conrad, Albany; G. W. Smith, Albany; W. T. Martin, Albany; G. W. Doyle, Albany; J. N. Barker, Darlington; C. B. F. Grantham, Stanberry; S. B. Hinkley, Stanberry; Edwin Lewis, Stanberry; — Crockett, Stanberry; W. M. Brooks, Stanberry; Fred Hinkley, Stanberry.

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Congress has couched a lance in the patent medicine fight. "Let the label tell," the watchword and principle of the pure food campaign, has been applied to the proprietary nostrum business in the Pure Food bill now under consideration, and with dismayed effect upon the trade. Under the present system of fraud and imposition, patent medicine labels "tell," it is true—but what? Mainly lies. For example, that the

opium laden soothing syrup which stupefies children into quietude is "perfectly harmless;" that the hopeless consumptive may be cured by swallowing some concoction of morphine and chloroform; that dilute sulphuric acid, when trade-marked "Liquozone," or raw alcohol embellished with the name "Peruna," acquires thereby magical powers of exorcising the demons of sickness from all and sundry. Quite a different story will appear on the nostrum bottle should the pure food bill become a law. First, the label must state accurately the amount of alcohol, opium, cocaine, or any other poison contained in the article. Second, the claims to curative properties must be true, for if the package or bottle bears any statement which is false "in any particular," the product is misbranded and therefore illegal. Beyond self-revelation in the matter of poison, the label may be as reticent as it chooses. Ask it no questions and it will tell you no lies. In silence it may find its refuge, but with silence how much of romance and fulgent imagery dies away. In the arid prospect the light that never was on land or sea fades out of the benevolent countenance of Lydia Pinkham. From between the chaste lines of Dr. Kilmer's side whiskers issues a weak censored line of pledges to our kidneys. What Dr. William's Pink Pills will do to the pale people in the matter of mental, moral and physical regeneration is banished from the box. The Duffy's Malt Whiskey flask is but a shadowy survival of itself and the Peruna bottle that was entered in our last fiction contest goes down to our children's

children as a relic of the golden age of witchcraft. Threats of legislation always bring the quack-protectors flocking to the spot. As the chief protecting agency, the Proprietary Association of America has opened its defensive campaign in Washington by sending on its head press agent, one Beardsley. Shortly before the Pure Food bill came to a vote in the Senate he wired to the principal nostrum firms of the country that Senator Hemenway of Indiana would get in an amendment safeguarding their interests. Senator Hemenway duly appeared upon the floor of the Senate with a letter from Mr. Beardsley, in which that gentleman expressed the pious hope "that no drug shall be deemed misbranded under this bill by reason of any statement made in good faith relating solely to the medicinal properties of the drug or its ingredients." That is, Peruna might, if it so choose, claim to turn negroes white; Dr. Munyou could guarantee to arrest old age, and Hood's Sarsaparilla should not be prevented in any "good faith" agreement to cure

rigor mortis. Senator Hemenway, in reading the letter, neglected to inform the Senate that Mr. Beardsley was a paid employe of the Proprietary Association of America. Following further his mentor's lead, the speaker used as types of the patent medicine industry, Pepto-Mangan and Glyco-Thymoline, neither of which, by a strange circumstance, belongs to the Proprietary Association of America. Why this modesty in putting forth typical medicines? Peruna, which has been recently declared a liquor by the Government, would have been an excellent instance; or Kopp's Baby Friend, with its grim list of coroner's verdicts. Both of these are members of the association, yet they were not mentioned. Did the astute Mr. Beardsley fool the confiding Senator from Indiana, or was the latter buncoing his colleagues? As the patent medicine section has been made "Water-tight" in the House, the fight will be transferred thither, and the country will see and recognize the Congressional defenders of the Great American Fraud.—*Collier's Weekly*.



## MISSOURI STATE MEDICAL ASSOCIATION.

Jefferson City, May 15, 16, 17, 1906.

## OFFICERS.

1906.

## PRESIDENT.

D. C. GORE, M. D. .... Marshall, Mo.

## VICE PRESIDENTS.

C. D. AVERY, M. D. .... Troy

J. P. BURKE, M. D. .... California

F. A. GLASGOW, M. D. .... St. Louis

T. F. LOCKWOOD, M. D. .... Butler

E. LOWREY, M. D. .... Excelsior Springs

## SECRETARY.

C. M. NICHOLSON, M. D. .... St. Louis

## ASSISTANT SECRETARY.

E. J. GOODWIN, M. D. .... St. Louis

## TREASURER.

J. F. WELCH, M. D. .... Salisbury

## COMMITTEES.

## ARRANGEMENT COMMITTEE:

S. V. Bedford

C. P. Hough.

J. B. Martin.

W. A. Clark.

L. T. Leach.

O. L. Moore.

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J. E. Lopp.

W. W. Norwood.

I. N. Enloe.

A. W. McAlester.

J. P. Porth.

G. Ettmueller

J. A. Hill.

E. R. Son.

J. L. Thorpe.

S. C. Yates.

## COMMITTEE ON SCIENTIFIC WORK.

C. M. Nicholson,

E. L. Chambliss,

A. R. Kieffer.

## PUBLICATION COMMITTEE.

C. M. Nicholson.

F. J. Lutz.

B. M. Hypes,

W. B. Dorsett.

## COMMITTEE ON PUBLICATION AND LEGISLATION.

F. J. Lutz.

W. S. Allee.

H. E. Pearse.

## COUNCILLOR DISTRICTS.\*

First District—F. B. Miller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, *Lewis*.

Second District—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District—E. H. Miller, Liberty. Counties: Clay, Ray, Platte, Clinton, Caldwell, Gentry, Harrison, Worth, Daviess, *DeKalb*,

Fourth District—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, Reynolds, Iron, Perry, St. Genevieve, *St. Francois*.

Tenth District—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District—W. D. Porterfield, Jr., Cape Girardeau. Counties: Scott, Madison, Cape Girardeau, *Bollinger*.

Twelfth District—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Cooper, *Hickory*.

Fourteenth District—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Barton, Cedar, Vernon, *Dade*.Sixteenth District—R. L. Johnson, Rolla. Counties: Crawford, Phelps, Pulaski, Laclede, *Dent, Dallas*.Seventeenth District—J. E. Tefft, Springfield. Counties: Greene, Lawrence, *Christian, Stone, Barry, Webster, Polk, Taney*.Eighteenth District—H. C. Shuttee, West Plains. Counties: Howell, *Ozark, Oregon, Texas, Wright, Shannon, Douglas*.

\*Counties in italic are unorganized.

## HOUSE OF DELEGATES.

COUNTY.	DELEGATE.	COUNTY.	DELEGATE.
Adair.....	A. E. Grim	Lincoln.....	C. D. Avery
Andrew.....	D. B. Bryant	Linn.....	D. F. Howard
Audrain.....	R. W. Berry	Livingston.....	Reuben Barney
Bates.....	A. E. Lyle	Madison.....	S. C. Slaughter
Benton.....	S. O. Davis	Marion.....	Thos. Chowning
Boone.....	A. R. McComas	Miller.....	W. S. Allee
Buchanan.....	T. H. Doyle	Mississippi.....	G. R. Wallace
Butler.....	Ira W. Seybold	Moniteau.....	W. R. Patterson
Caldwell.....	Tinsley Brown	Morgan.....	A. J. Gunn
Cape Girardeau.....	R. F. Wichterich	Newton.....	R. C. Lamson
Carter-Shannon.....	P. D. Gun	Nodaway.....	E. L. Crowson
Cass.....	J. S. Triplett	Pemiscot.....	M. D. Hendrix
Cedar.....	Chas. A. Edgar	Perry.....	J. W. Russell
Chariton.....	J. H. P. Baker	Pettis.....	W. J. Ferguson
Clinton.....	Robt. W. Rea	Phelps.....	S. L. Baysinger
Cole.....	J. L. Thorpe	Pike.....	T. Guy Hetherlin
Cooper.....	R. L. Evans	Platte.....	Spence Redman
Daviess.....	H. E. Songer	Putnam.....	J. A. Townsend
Franklin.....	Chas. F. Briegleb	Ralls.....	T. J. Downing
Gasconade.....	Maries-Osage	Saline.....	J. E. Harris
	W. E. Seba	Schuyler.....	W. F. Mitchell
Grundy.....	W. H. Winningham	Scotland.....	A. E. Platter
Harrison.....	A. H. Vandivert	Shelby.....	Charles Chapman
Henry.....	Wm. H. Gibbins	Ste. Genevieve.....	G. M. Rutledge
Holt.....	B. T. Quigley	St. Louis.....	Roy D. Moore
Howard.....	C. O. Lewis		P. Y. Tupper
Howell.....	J. W. Bingham		J. S. Myer
	F. L. Cook		J. C. Morfit
	N. P. Wood		W. W. Graves
Jackson {	J. M. Frankenburger	St. Louis {	W. H. Stauffer
	William J. Frick	City {	M. B. Clopton
	Herman E. Pearse		C. A. Snodgras
Jefferson.....	A. H. Hamel		H. W. Soper
Johnson.....	J. I. Anderson		F. L. Henderson
Knox.....	Henry J. Jurgens		John Green, Jr.
Laclede.....	J. A. McComb	Stoddard.....	T. C. Allen
Lafayette.....	C. T. Ryland	Vernon.....	J. Robert Buchanan
Lawrence.....	C. A. Moore	Washington.....	W. S. Smith
		Worth.....	W. E. McKinley

## NOTICE.

Medical and Surgical Section will be held at the Capitol Building. Physicians in attendance will please register with the Registration Committee immediately upon their arrival.

It is necessary for the certificate to bear the signature of the Secretary and Joint Agent before it will be honored by the ticket agent for reduced return fare.

It is especially desired that the members be prompt in their attendance at all sessions, which will be called to order at the hour fixed on the Program.

All papers must be typewritten and should be handed to the Secretary of the Section as soon as read.

No paper will be allowed to occupy more than twenty minutes in its reading. Speakers designated to open discussion may speak seven minutes, general discussion five minutes, and ten minutes for closing the discussion by the essayists. No one may speak the second time on one subject without the unanimous consent of the members present.

## PROGRAM.

TUESDAY, MAY FIFTEENTH.

- House of Delegates called to order at 10:30 a. m.
- Judicial Council called to order at 10:30 a. m.
- Roll call and announcement of result.
- Reading of minutes of previous meeting.
- Reading of President's message and recommendations.
- Report of Committee on Arrangements.
- Report of Committee on Scientific Work.
- Report of Committee on Public Health and Legislation.
- Report of Publication Committee.
- Report of Treasurer.
- Report of Secretary.
- Election of Committee on Nomination.

## REPORT OF COUNCILLORS.

- 1st District.....F. B. Miller, Kahoka
- 2nd District.....J. D. Brummall, Salisbury
- 3rd District.....E. H. Miller, Liberty
- 4th District.....C. H. Wallace, St. Joseph
- 5th District.....L. W. Dallas, Hunnewell
- 6th District.....Woodson Moss, Columbia
- 7th District.....W. B. Dorsett, St. Louis
- 8th District.....F. J. Lutz, St. Louis
- 9th District.....B. M. Hypes, St. Louis
- 10th District.....J. J. Norwine, Poplar Bluff
- 11th District.....W. D. Porterfield, Jr., Cape Girardeau
- 12th District.....W. S. Allee, Olean
- 13th District.....R. D. Haire, Clinton
- 14th District.....M. P. Overholser, Harrisonville
- 15th District.....A. R. Snyder, Joplin
- 16th District.....R. L. Johnson, Rolla
- 17th District.....J. E. Tefft, Springfield
- 18th District.....H. C. Shuttee, West Plains



**MEDICAL SECTION.**

SECOND DAY—WEDNESDAY, MAY 16TH.

MORNING SESSION, 9 O'CLOCK.

- The Nervous System of the Child.....Scott P. Child, Kansas City  
 Discussion opened by Dr. C. R. Woodson, St. Joseph.
- Ovarian Function.....Davis Forster, St. Louis  
 Discussion opened by R. H. Goodier, Hannibal.
- The Use and Abuse of the Obstetrical Forceps...A. L. Gray, St. Joseph  
 Discussion opened by F. B. Hiller, Kahoka
- Typhoid Fever.....E. P. Davis, Woodruff  
 Discussion opened by E. H. Miller, Liberty.
- Illegal Practice of Medicine.....H. F. McGinnis, Higginsville  
 Discussion opened by H. C. Shuttee, West Plains.
- Intestinal Auto-Intoxication.....J. B. Norman, California  
 Discussion opened by J. E. Thornton, Columbia.
- The Best Time to Give Quinine.....R. L. Johnson, Rolla  
 Discussion opened by G. Greenwood, Fredericktown.
- Criminal Abortion; A Prevailing Evil Against the Unborn Generation:  
 A National Crime Committed for Mere Social Promotion.  
 T. F. Lockwood, Butler  
 Discussion opened by C. H. Chastain, Weston.

**MEDICAL SECTION.**

SECOND DAY—WEDNESDAY, MAY 16TH

AFTERNOON SESSION, 1:30 P. M.

- Malaria.....T. C. Allen, Bernie  
 Discussion opened by H. G. Wyer, Kirkwood
- Broncho-Pneumonia.....T. O. Davis, Maitland  
 Discussion opened by Woodson Moss, Columbia.
- The Present Status of Psychotherapy. Dora Green-Wilson, Kansas City  
 Discussion opened by J. D. Brummall, Salisbury.
- Cough.....J. C. Buckwalter, St. Louis  
 Discussion opened by W. E. Abrams, Kansas City.
- Infantile Intussusception from the Country Practitioner's Standpoint.  
 J. D. Brummall, Salisbury  
 Discussion opened by John Zahorsky, St. Louis.
- Mucous Colitis.....F. H. Matthews, Liberty  
 Discussion opened by O. H. P. Mills, Grant City.
- Syphilis of the Nervous System.....C. J. Morrow, Kansas City  
 Discussion opened by Wm. W. Graves, St. Louis.
- Ear-Tire as a Factor in Disease.....E. H. Mussen, Rockingham  
 Discussion opened by R. Barclay, St. Louis.

SECOND DAY—WEDNESDAY, MAY 16TH.

GENERAL SESSION 7:30 P. M.

- ADDRESS OF PRESIDENT.....Dr. D. C. Gore, Marshall
- ADDRESS IN MEDICINE.....Dr. W. G. Moore, St. Louis.
- ADDRESS IN SURGERY.....Dr. C. H. Wallace, St. Joseph

**MEDICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

MORNING SESSION, 9 O'CLOCK.

- The White Plague.....H. Jarard, Pleasant Hill  
Discussion opened by G. D. Allee, Lamar.
- Albuminuretica.....C. O. Lewis, Fayette  
Discussion opened by Kimball Hill, Eldorado Springs
- Arteriosclerosis.....Tinsley Brown, Hamilton  
Discussion opened by M. O. Biggs, Bowling Green
- The Therapeutics of Eczema.....W. J. Frick, Kansas City  
Discussion opened by S. M. Brown, Monroe City
- Missouri Sanatorium for the Treatment of Incipient Tuberculosis, and  
its Legal Foundation.....W. M. Bayliss, Mt. Vernon  
Discussion opened by Wm. Porter, St. Louis.
- Treatment of Adenoids by the General Practitioner  
W. E. McKinley, Denver  
Discussion opened by H. A. Booth, Pacific
- Neurasthenia, Traumatic and Idiopathic: Its Pathology and Progno-  
sis.....David S. Booth, St. Louis  
Discussion opened by R. D. Ramey, Garden City.
- Etiology and Cure of Hysteria.....E. F. Walter, Perry  
Discussion opened by A. B. Freeman, Joplin
- State Medicine.....C. M. Mitchell, Blythedale  
Discussion opened by L. W. Dallas, Hunnewell,

**MEDICAL SECTION**

THIRD DAY—THURSDAY, MAY 17TH.

AFTERNOON SESSION, 1:30 P. M.

- Etiology of Pneumonia.....C. A. Snodgras, St. Louis  
Discussion opened by B. H. Zwart, Kansas City.
- Histology of Pneumonia.....Frank J. Hall, Kansas City  
Discussion opened by M. P. Overholser, Harrisonville.
- Diagnosis of Pneumonia.....Robert T. Sloan, Kansas City  
Discussion opened by W. E. Fischel, St. Louis.
- Treatment of Pneumonia.....W. G. Moore, St. Louis  
Discussion opened by E. W. Schaffler, Kansas City.
- Gas Bacillus Infection; the Clinical Results of the Development in the  
Bacillus Aerogenes Capsulatus....Ernest E. Robinson, Kansas City  
Discussion opened by J. R. Mudd, St. Charles.
- The Importance of the Sigmoid Flexure in the Production of Enter-  
optosis, Pelvic Displacement and Reflex Phenomena.  
J. M. Allen, Liberty  
Discussion opened by D. B. Bryant, Savannah
- The Treatment of Gastric Ulcer.....Franklin E. Murphy, Kansas City  
Discussion opened by G. A. Greeson, Lincoln

## SURGICAL SECTION.

SECOND DAY—WEDNESDAY, MAY 16TH.

MORNING SESSION, 9 O'CLOCK.

- Ectopic Pregnancy.....O. B. Campbell, St. Joseph  
 Discussion opened by J. F. Cherrington, Chillicothe
- Epithelioma of the Lip.....J. J. Claussen, Kansas City  
 Discussion opened by R. E. Schlueter, St. Louis.
- Abdominal Injuries.....H. C. Dalton, St. Louis  
 Discussion opened by W. J. Frick, Kansas City.
- Suprapubic Cystotomy as Preliminary to and as a Route for the Performance of a Considerable Number of Prostatectomies,  
 W. T. Elam, St. Joseph  
 Discussion opened by Bransford Lewis, St. Louis.
- Spina Bifida.....J. D. Seba, Bland  
 Discussion opened by T. C. Boulware, Butler.
- Some Remarks on the Treatment of Chronic Joint Disease  
 M. M. Edmondson, Kansas City  
 Discussion opened by Phil Hoffman, St. Louis
- Surgical Aspects of Typhoid Fever.....C. G. Kirchner, St. Louis  
 Discussion opened by J. F. Binnie, Kansas City.
- Suppuration of the Superior Maxillary Sinus with Involvement of  
 Ethmoidal Cells and Sphenoidal Sinuses.....H. Jurgens, Edina  
 Discussion opened by H. W. Loeb, St. Louis.

## SURGICAL SECTION.

SECOND DAY—WEDNESDAY, MAY 16TH.

AFTERNOON SESSION, 1:30 P. M.

- An Unusual Retroperitoneal Tumor in the Mesocolon Simulating a Fibroid of the Uterus.....W. B. Dorsett, St. Louis  
 Discussion opened by C. G. Geiger, St. Joseph.
- Pyuria.....E. G. Mark, Kansas City  
 Discussion opened by A. R. Snyder, Joplin.
- Limitations of Surgical Procedures in Cancer...G. W. Broome, St. Louis  
 Discussion opened by C. Lester Hall, Kansas City.
- The Limitations of Surgical Interference.Ernest von Quast, Kansas City  
 Discussion opened by H. Talbot, St. Louis.
- Some Questions Concerning the Treatment of Uterine Fibromyomata,  
 H. S. Crossen, St. Louis  
 Discussion opened by H. C. Crowell, Kansas City.
- The Treatment of Retroflexion of the Uterus.A. F. Hertzler, Kansas City  
 Discussion opened by Robert Funkhouser, St. Louis.
- Some Recent Advances in Ophthalmology.....J. M. Ball, St. Louis  
 Discussion opened by B. E. Fryer, Kansas City.
- Rectal Abscesses.....J. M. Frankenburger, Kansas City  
 Discussion opened by W. H. Stauffer, St. Louis.

SECOND DAY—WEDNESDAY, MAY 16TH.

GENERAL SESSION, 7:30 P. M.

- ADDRESS OF PRESIDENT.....Dr. D. C. Gore, Marshall
- ADDRESS IN MEDICINE.....Dr. W. G. Moore, St. Louis.
- ADDRESS IN SURGERY.....Dr. C. H. Wallace, St. Joseph



**SURGICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

MORNING SESSION, 9 O'CLOCK.

- Non-Lithogeneous Obstruction of the Biliary Ducts,  
A. E. Cordier, Kansas City  
Discussion opened by H. G. Mudd, St. Louis.
- Lessons to be Drawn from Recent Operations on the Stomach,  
W. Bartlett, St. Louis  
Discussion opened by A. H. Cordier, Kansas City.
- Appendicitis.....C. G. Geiger, St. Joseph  
Discussion opened by W. H. Farrar, De Soto.
- Why Some Appendectomies are Followed by Prolonged Abdominal  
Pain.....Francis Reder, St. Louis  
Discussion opened by C. M. Barbee, Kansas City.
- The Country Doctor and Appendicitis.....M. P. Shy, Knobnoster  
Discussion opened by J. J. Norwine, Poplar Bluff.
- Surgical Problems in Spinal Trauma.....John C. Morfit, St. Louis  
Discussion opened by R. McE. Schaufler, Kansas City.
- Tuberculous Disease of the Joint.....T. E. Potter, St. Joseph  
Discussion opened by H. Tuholske, St. Louis
- The Importance of Post-Operative Treatment in Diseases of the  
Rectum.....W. H. Stauffer, St. Louis  
Discussion opened by E. H. Thrailkill, Kansas City.

**SURGICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

AFTERNOON SESSION, 1:30 P. M.

- The Relative Value of the Surgical Procedure Employed for the Relief  
of Paralysis Following Acute Anterior Poliomyelitis,  
Nathaniel Allison, St. Louis  
Discussion opened by W. C. Overstreet, Sedalia
- Surgery of the Liver.....St. Elmo Sanders, Kansas City  
Discussion opened by Paul Y. Tupper, St. Louis.
- Do We Cure Diffuse General Peritonitis...John Young Brown, St. Louis  
Discussion opened by J. N. Jackson, Kansas City.
- A Method of Radical Relief of Cases of Deafness Long Abandoned as  
Hopeless, Illustrated by Report from Actual Practice,  
R. Barclay, St. Louis  
Discussion opened by Theo. S. Blakesley, Kansas City.
- A Method of Operating in Inguinal and Femoral Hernia When Com-  
plicated by Abscesses.....Herman E. Pearse, Kansas City  
Discussion opened by F. J. Lutz, St. Louis
- Ovarian Tumors, and Presentation of Specimen.  
J. D. Porterfield, Jr., Cape Girardeau  
Discussion opened by F. R. Anthony, Maryville.
- Tuberculous Affections of the Rectum....E. H. Thrailkill, Kansas City  
Discussion opened by Leon Straus, St. Louis.
- Primary Tuberculosis of the Rectum with Report of Cases,  
Leon Straus, St. Louis  
Discussion opened by C. C. Leeper, Braymer.

## COUNTY SOCIETY NOTES.

## BUCHANAN COUNTY MEDICAL SOCIETY.

Buchanan County Medical Society met in regular session February 7th, Dr. O. B. Campbell, president, in the chair. Drs. J. W. Ferguson, E. L. Ballard and Wm. Wallis were elected to membership. Dr. S. D. Smith's transfer card from Atchison County Medical Society was received and accepted.

Dr. E. A. Donelan introduced a resolution to the effect that the Buchanan County Medical Society, through its secretary, write Senators Stone and Warner and Representative Fulkerson, urging them to use their influence in passing the Pure Food Bill.

Dr. W. L. Kenney presented a case of fibro-sarcoma of the orbit. The tumor had been removed nearly a year ago and the x-ray used following the operation. Up to date no recurrence had taken place. The pathological specimen was also exhibited.

Dr. Clarence Good read a paper on "The Treatment of Chronic Bright's Disease." The essayist was not in favor of the exclusive milk diet so often prescribed in these diseases. The great danger of the milk diet lay in its high protein percentage. Each litre of good cow's milk contains about 40g of protein. If milk is freely used as a diet, it causes the formation of 30-35g of urea and as urea is secreted with difficulty, it throws an extra amount of work on an already diseased organ. The essayist advised the use of milk in moderation

with the addition of cream, cereals, legumes, eggs and even meat. In the treatment of chronic interstitial nephritis Dr. Good favored the restriction of fluids and was decidedly opposed to the "drinking cures" so often prescribed. In this class of nephritis the welfare depended upon the condition of the heart and arteries, and as the disease is usually accompanied by a high arterial tension, the inbibing of large quantities of water continuously could not be other than harmful. The occasional prescribing of the free drinking of water might be beneficial, yet it was by no means proven that the secretion of large quantities of urine increased the excretion of the solids of the urine.

Dr. Jacob Geiger read a paper on "The Surgical Treatment of Chronic Bright's Disease." Dr. Geiger stated that he had had no personal experience with the surgical treatment of chronic kidney disease, but that he believed it a rational treatment in certain desperate cases as a means of prolonging life, and that while the ultimate results were not yet known, that the surgical treatment certainly did cause a marked temporary improvement in some cases.

These papers elicited a free discussion which was participated in by Drs. Elam, Leonard, Chas. Geiger, Scott and O. B. Campbell.

## BUTLER COUNTY MEDICAL SOCIETY.

At the meeting held at Poplar Bluff on January 26th, the roll of

membership was called as follows: Drs. B. C. Jones, Dewitt Eskew, I. W. Seybold, J. M. P. Smith, A. W. Davidson, A. Windsor, W. A. Kendall, J. J. Norwine, J. W. Mott, W. F. S. Taylor, Victor Cadwell, C. W. Williamson, C. O. Wright. Present, Drs. Seybold, Smith, Kendall, Norwine, Mott, and C. O. Wright. The minutes of the meeting of December 29th, 1905, were read and approved. The newly elected officers for 1906 were installed. Note was taken of the incorporation in the minutes of the resolutions relative to patent medicines, impure food and advertising thereof. Dr. W. A. Kendall was elected reporter for the ensuing year.

#### MEETING OF FEBRUARY 23RD.

Present, Drs. J. J. Norwine, president; I. W. Seybold, secretary; Eskew, Jones, Kendall, Mott and Smith. The minutes of the last meeting were read and approved.

Dr. Mott reported a case illustrating two points in practice. A man seriously injured in his remaining eye and contrary to advice, self-willed, worked until threatened with blindness. The later diagnosis and advice was confirmed by three city specialists of high standing, but another doctor assumed to operate early and total blindness followed.

Dr. Norwine reported a case of mild diphtheria (decided by the microscope) in which antitoxin saved the patient, and the other children of the family were saved by prophylactic use of iodine, mercury bichloride and ferri chloridi. Dr. Mott related a similar experience but added potassium chloride to the treatment. Dr. Seybold agreed

with the other speakers and mentioned the use of quick-lime slacked in a vessel placed under a blanket, the fumes being inhaled by patients. There was uniformity of belief in the beneficence of antitoxin and of the applications of various preparations containing chlorine for prophylaxis. Mention was made that diphtheritic conditions are milder in some localities than in others.

Dr. Jones called attention to the tendency of many persons to resort to pretentious methods of restoring health and to the confidence manifested in the claims of some new operators. The question arose whether physicians are not in some degree responsible for this tendency on the part of credulous people; the wonderful developments of remedial science needed to be impressed upon the people more than had been done.

W. A. KENDALL, Reporter.

#### CHARITON COUNTY MEDICAL SOCIETY.

Chariton County Medical Society met in Dr. Welch's office in Salisbury, February 22nd, at 8:30 p. m., Vice President McEwen in the chair. Owing to the extremely bad condition of the roads, the attendance was small. Dr. J. D. Brumhall, chairman of committee on year book, reports the book will be ready in a few days. Dr. Welch moved that the dues of Dr. C. A. Jennings, secretary and treasurer, be remitted for the year 1906; motion carried. The consideration of a motion made by Dr. McEwen in regard to the strong position taken by *Collier's Weekly* and the *Ladies' Home Journal*, against the indiscriminate sale



of patent medicines, etc., was postponed until the next meeting. Dr. J. D. Brummall reported some interesting cases.

On motion the society adjourned to meet in Salisbury on Thursday, the 29th of March, at 8:30 p. m.

W. L. BAKER Reporter.

### CLINTON COUNTY MEDICAL SOCIETY.

The Clinton County Medical Society met in Plattsburg, March 6th, with a fair attendance of members. The meeting was called to order by the president. Minutes of last meeting were read and approved.

Owing to absence of the essayists there were no papers read at this meeting. Dr. John Sturgis presented a clinic, the case being one of chronic catarrhal gastritis, which was treated by lavage with Turk's tube and followed by massage with vaporized compressed air.

The next meeting will be held in Plattsburg, April 3rd.

E. A. COLLEY, M. D., Sec.

### DAVIESS COUNTY MEDICAL SOCIETY.

Daviess County Medical Society met at Gallatin on February 27th, with the vice president. Dr. W. L. Brosius, in the chair. The scientific program of the meeting consisted of reports of interesting cases by the following members: Drs. Pitkin, Hanna, Doolin, Smith, Waller, Wetzel, Claggett and Songer. Much interest was manifested in these reports.

The following officers were elected for the ensuing year: President, W. L. Brosius; first vice president, N. M. Wetzel; second vice

president, L. R. Doolin; secretary and treasurer, M. A. Smith; reporter, H. E. Songer; delegate, H. E. Songer; alternate N. M. Wetzel.

The next meeting of the society will be held on the first Tuesday in May.

H. E. SONGER, Reporter.

### HENRY COUNTY MEDICAL SOCIETY.

Henry County Medical Society met in regular session Wednesday, March 14, 1906, Dr. Wm. H. Benway, president, in the chair. Minutes of the previous meeting were read and approved. Present: Drs. Benway, Wm. M. Shankland, Wm. H. Gibbins, R. D. Haire, F. M. Douglass, J. M. Miller, R. B. Fewell, W. C. Tanner, A. E. Derwent and J. E. Kunkler.

Dr. Shankland reported a case of stab wound of the neck, left side, just behind the angle of the jaw and below the ear, penetrating one and a half inches. The boy ran to the house and could be tracked easily by the blood. He reached the house, called for help and fell in a faint. Inmates took him in, placed him on a bed, on his right side, and put soot, spider web and flour on the wound to stop flow. I was called and arrived at the house in about one and a half hours. Flow of blood had ceased. Cleansed the wound and probed to its depth; no return of the hemorrhage nor has there been since; wound has healed. While still lying on the right side, he became comatose. Coma began leaving him in ten hours, but there was paralysis of the right side below the neck and of the left side of face, and complete aphony. This aphony and

paralysis began to recede in about ten days. Now, two months after the injury, he can talk intelligently, read and write, and the gait is not halting nor is there any dragging on the right side. No previous fall before he fainted from loss of blood. Now what was the cause of the coma and why should it pass away so soon while the paralysis has been present so long? Clot was excluded and I think it may be a thrombus. Discussion of the case did not elucidate the matter, some contending for a clot, others for a thrombus or a jar of the middle meningeal.

Dr. Gibbins spoke about the dues of the county society being burdensome upon a great many of the members and thought that fifty cents annual dues were enough. That might be an incentive for many to come in and retain their membership.

The board of censors reported favorably upon the application of Dr. A. E. Derwent, of Clinton, for membership, and upon a vote he was declared a member.

Dr. J. E. Kunkler comes as a member from the McLane County, (Illinois) Medical Society, and paid his dues to the state and county societies.

A motion prevailed that the members of the board of censors arrange for a banquet at the next regular meeting in June.

R. D. HAIRE, M. D., Secretary.

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## JASPER COUNTY MEDICAL SOCIETY.

MEETING OF FEBRUARY 5TH.

Jasper County Medical Society

met in regular session in the parlors of the Y. M. C. A. building at Joplin at 8:30 p. m., Dr. Pifer presiding. The following members were present: Drs. Pifer, Matthews, Kelso, Shelton, Kincheloe, Neff, Grantham, Lanyon, Bachelder and James. Visitors, Drs. Haas, Blockerley, F. W. Bailey, Taylor, Blackwell of Joplin and Ketcham and Wolfe of Carthage. Minutes of the previous meeting were read and approved.

Dr. Shelton read a paper on "Albuminuric Retinitis" which was freely discussed by all the members present. Dr. Matthews reported the case of a pregnant woman who suffered greatly from impairment of vision. Abortion was induced which resulted in restoring vision and the patient is now alive and apparently well. Dr. Grantham discussed the "Treatment of Bright's Disease by Decapsulation of the Kidneys." He believes the results will warrant this procedure.

In the discussion of these papers, Dr. Shelton stated that all true cases of albuminuric retinitis as a rule succumb within a year to the attack.

Dr. Grantham reported three cases of ectopic gestation on which he had operated.

The following applications for membership were read and referred to the committee for report: Drs. J. D. Newman, Joplin; R. Hill, Joplin; C. M. Ketcham, Carthage; S. D. Meredith, W. E. Steele and B. F. Wolfe, Carthage.

Dr. Bachelder, of Asbury, will read a paper at the next meeting on "Practical Laboratory Work."



## MEETING OF FEBRUARY 19TH.

The regular session of Jasper County Medical Society was held in the parlors of the Y. M. C. A. at 8:30, Dr. J. D. Pifer in the chair. Members present: Drs. Pifer, Miller, Neff, Kelso, Shelton, Clark, Bachelder, Matthews and James. Visitors, Drs. Haas and Killian of Joplin. Minutes of the last meeting were read and approved. The application for membership of the following names were reported upon favorably by the board of censors: Drs. C. M. Ketcham, J. D. Newman, D. R. Hill, S. D. Meredith, W. E. Steele, B. F. Wolfe. On motion the rules were suspended and the society cast a vote of approval and the applicants were declared elected to membership.

The application for membership of Dr. H. R. Haas was referred to the committee for approval.

The treasurer read his report for the year 1904 and 1905. This report shows a balance in the treasury of \$19.55. On motion the report was accepted.

On motion it was decided to invite the Cherokee Society of Kansas to attend our first meeting in April.

The scientific program consisted of a paper by Dr. F. S. Bachelder on "Practical Laboratory Work." This was a splendid essay to which the society listened with much pleasure and profit. After all business had been dispensed with, the members were invited to the Hotel Clarendon and enjoyed a splendid dinner prepared for their entertainment by Dr. R. S. Kelso.

R. M. JAMES, Secretary.

## JACKSON COUNTY MEDICAL SOCIETY.

## MEETING OF FEBRUARY 20, 1906.

The Jackson County Medical Society held its regular weekly meeting in the rooms of the Kansas City Athenaeum, February 20, 1906, the president, Dr. E. H. Thrailkill, in the chair. Sixty-three members were in attendance at this meeting.

The following were elected to membership: Drs. H. D. Hamilton, A. L. Hearst, J. W. Green, of Independence, and R. L. St Clair.

The scientific program consisted of a paper and two case reports. Dr. J. H. Thompson read a paper entitled "The Significance of Intra-Ocular Hemorrhages." This paper was of special interest and value to the general practitioner. Dr. C. F. Roberts reported a case of the "Removal of a Foreign Body from the Male Bladder." The foreign body was a rubber catheter which had been introduced by the patient, an old man, and which had broken at the posterior urethra when he attempted to remove it. The portion of catheter was removed by the perineal route. Dr. B. C. Hyde reported a case of "Septic Endocarditis," and presented the heart illustrating in a striking manner the malignant, destructive type of the disease. The discussions were opened in succession by Drs. B. E. Fryer, E. E. Hubbard and E. L. Stewart (in the absence of Dr. R. T. Sloan) and the following took part in the general discussion: Drs. G. W. Grove, Joseph Lichtenberg, Franklin E. Murphy, W. H. Coffey, J. Q. Chambers, H. O. Hanawalt, Frank J. Hall, J. M. Langsdale, John Wil-



son, E. E. Hubbard, O. H. Leonard, C. B. Hardin and J. W. Kimberlin taking part. Drs. Thompson, Roberts and Hyde closed the discussion.

#### MEETING OF FEBRUARY 27, 1906.

The regular weekly meeting of February 27, 1906, was called to order by the vice president, Dr. O. H. Dove. Sixty-six were present at this meeting.

Dr. J. H. Ralston was elected to membership.

The scientific program consisted of a Symposium on Cancer of the Breast. The first topic was "The Etiology and Pathology" by Dr. J. J. Clausen, who exhibited histologic specimens; the next topic was entitled "The Technic of Operation for Cancer of the Breast" by Dr. H. C. Crowell; and the last topic, "Treatment by the X-Rays," by Dr. J. N. Scott.

Dr. C. M. Fulton opened the discussion on Dr. Clausen's paper, Dr. W. J. Frick on Dr. Crowell's paper, and Dr. Maggie L. McCrea, in the absence of Dr. C. L. Spaulding, opened the discussion on Dr. Scott's paper. The following participated in the general discussion which was opened by Dr. J. N. Jackson: Drs. Jacob Block, A. E. Hertzler, E. F. Robinson, A. H. Cordier, R. M. Schaufler, J. M. Langsdale, Frank Hall, and C. F. Roberts. The discussion was closed by the respective essayists.

#### MEETING OF MARCH 6, 1906.

The regular weekly meeting convened in the Athenaeum Club rooms on March 6, 1906, the president, Dr. E. H. Thrailkill, in the chair. Thirty-five members were in attendance at this meeting.

Owing to the illness of Dr. Jabez

N. Jackson, and the absence of Dr. Jacob Block, the scientific program was, upon motion of the secretary, postponed until the next regular meeting, Dr. E. G. Mark consenting to read his paper at that time.

In place of the scientific program scheduled for the evening case reports were called for by the president and the following responded: Dr. E. G. Mark, with a case of "Mycosis of the Seminal Vesicles," and one of "Senile Hypertrophy of the Prostate;" Dr. J. W. Kyger, with a case of "Perforative Cholecystitis;" Dr. R. E. Sastelaw, a case of "Syphilis" in which there were two separate infections; Dr. A. E. Hertzler, a case of "Malignant Cystoma of the Ovary;" Dr. C. F. Roberts, a case of "Perforation of the Abdominal Wall by the Gradual Outgrowth of a Slender Spicula of Bone;" and Dr. C. Lester Hall, a case of "Encysted Vesical Calculus." These reports were discussed by Drs. Frank J. Hall, Howard Hill, E. G. Mark, H. C. Crowell, F. H. Brunig, C. M. Fulton and C. Lester Hall.

#### MEETING OF MARCH 13, 1906.

The regular weekly meeting of the society was held on Tuesday evening, March 13, 1906, the president, Dr. E. H. Thrailkill, in the chair. Forty-five were in attendance at this meeting.

The amendment to the Constitution and By-laws of the Jackson County Medical Society providing for the election of an executive committee introduced by Dr. C. B. Hardin at the meeting of February 6th, was adopted by the vote of the incorporations practicing medicine society.

The scientific program consisted of a "Symposium on Renal Surgery." Dr. E. G. Mark's topic was "Ureteral Catheterization as a Diagnostic and Therapeutic Measure;" Dr. Jacob Block's "The Diagnosis of Conditions Calling for Nephrotomy and Nephrectomy;" Jabez N. Jackson's, "The Technic of Renal Operations." The following took part in the general discussion: Drs. J. E. Binnie, C. Lester Hall, A. H. Cordier, H. C. Crowell, Howard Hill, C. M. Fulton, A. E. Hertzler and F. H. Brunig. Drs. Block, Mark and Jackson closed the discussion.

MAX GOLDMAN, M. D., Secretary,

## ST. LOUIS MEDICAL SOCIETY

MEETING OF FEBRUARY 24, 1906.

After reading of minutes of previous meeting, and the monthly reports of the various standing committees, Dr. L. C. McElwee, a member of the board of commissioners of the Missouri State Sanatorium for the Treatment of Incipient Pulmonary Tuberculosis, read a paper relative to this subject; he first gave a history of the origin and progress of the sanatorium idea in the treatment of pulmonary tuberculosis, also a description of several institutions of this kind which the commissioners had visited, and showed the plans for the proposed Missouri institution which will be located at Mt. Vernon, Mo., and for which the state has appropriated \$375,000, but only a small part of this is available at present. It is claimed that 70 per cent. of incipient cases are cured in these institutions, in from two months to two years' treatment. Certainly the state

could not spend money in any other way which would bring such large returns in saving of life and increasing the earning capacity of this large class of individuals. Statistics show that 1 in 10 of the population die of pulmonary tuberculosis; that means 300,000 of Missouri's 3,000,000 will be carried off by the "Great White Plague." If 70 per cent. of these could be cured by the sanatorium treatment, what an immense amount of good could be accomplished along this line. Discussion by Drs. Porter, Homan, Bliss, Stewart, Snodgras and Behrens.

A vote of thanks was extended Dr. McElwee.

Dr. Guthrie McConnell read a paper entitled "A Review of Cancer in the United States, According to the Twelfth Census." Discussion of the paper was postponed until next meeting owing to the lateness of the hour.

A pathological specimen of a very large aneurism of the hepatic artery was presented by Dr. Barnes and a clinical history of the case given by Dr. Evans.

Average attendance for the month, 73; elected to membership during the month, 23.

## MEETING OF MARCH 3RD.

The committee on public health and legislation reported the progress made in the prosecution of advertising quacks and newspapers publishing such obscene advertisements and recommended that a committee be appointed to raise funds to enable them to begin prosecution of in- and surgery unlawfully. The report of the committee was adopted and a committee appointed to raise



funds as requested.

The following were elected to membership: G. S. Beckham, 5110 Page Boulevard; L. P. Butler, Maryland and Euclid Avenues; Joseph A. Hardy, 7620 S. Broadway; Frank Hinchey, 1107 N. Grand Avenue; M. L. Klinefelter, 536 N. Taylor Avenue; L. J. Oatman, 4217 Olive Street; Frederick P. Parker, 1423 Euclid Avenue; D. R. Parman, Linmar Building; Otto Reinders, 2107 S. Eleventh Street; A. G. Wichman, 1624 S. Jefferson Avenue.

The society spent a very profitable evening in the consideration of that most fatal of all acute diseases, pneumonia, the mortality rate of which, in spite of our increased knowledge, continues to advance.

The program was in the form of a symposium with papers by Dr. J. R. Lemen, on Symptomatology, Dr. L. M. Warfield on Pathology, and Dr. W. G. Moore on Treatment. The papers were all first class and elicited a very thorough discussion, participated in by a number of the members. The principal remedies discussed were strychnine, digitalis, strophanthus, nitro-glycerine veratrim, vivide, creosote carbonate, quinine and alcohol; particular stress was placed on feeding, plenty of fresh air and sunlight.

The following resolutions were adopted:

Whereas, The St. Louis Medical Society has consistently and energetically supported the move in favor of a State institution for the care of persons in the early stages of tuberculosis, and legislation to this end with an appropriation of funds, was secured last year; and

Whereas, the economical construction of the buildings and effective maintenance of the State sanatorium for tuberculous persons is a matter of the first importance to the people of Missouri; and

Whereas, it is important that the money already appropriated shall be well and judiciously expended in order that by such showing this society may be enabled to consistently ask the next General Assembly for further appropriations for building and maintenance; and

Whereas, grave doubts have arisen that the plans as proposed and presented by the Board of Commissioners for the said institution are not likely to be effective and economical; and

Whereas, this society, to whose efforts the present law is largely due, desires the best results and also desires to aid the Board of Commissioners in every way, therefore be it

Resolved That the said Board of Commissioners be and are hereby respectfully requested to confer and advise further before a final decision thereon is reached, and that the plans as aforesaid be held in abeyance awaiting the outcome of such further consideration and deliberations.

#### MEETING OF MARCH 10TH.

The scientific program as prepared by the executive committee consisted of two papers, one by Dr. F. J. Lutz, "A Plea for the Early Establishment of Collateral Circulation in Hepatic Cirrosis." Dr. Lutz being unable to attend this paper was laid over until some future meeting.

The second paper, "Menstruation from the Cervix." by Dr. T. C. Witherspoon, was of great interest, because of the scarcity of literature



on the subject. The doctor reported two cases—the uterus and tubes having been removed in both instances by a supra-vaginal amputation, the ovaries being left; both cases continue to menstruate regularly from the remaining cervix. The only difference between the menstruation before and since the operation is, that now it only lasts, in one case from 24 to 36 hours and in the other from 36 to 48 hours, instead of from 3 to 4 days as formerly. Discussed by Drs. Ehrnfest, Gellhorn, Dorsett, Forster, Murphy, Fisch and Taussig. Attendance 90.

#### MEETING OF MARCH 17.

A communication from the secretary of the board of commissioners of the Missouri State Sanatorium for Incipient Pulmonary Tuberculosis was read, asking that a committee from the St. Louis Medical Society be appointed to confer with the board of commissioners in accordance with the resolutions adopted by the society, at the meeting of March 3rd. The motion, that such a committee be appointed, carried.

The symposium on Sinus Diseases, "Etiology," by Dr. F. C. Ewing. The doctor considered, among other causes, extension of inflammation from continuity and contiguity of tissue, bacterial infection, lodgement within the sinuses of foreign bodies, trauma, syphilis, tuberculosis, new growths and decayed teeth.

"Diagnosis"—by Dr. G. Sluder. He spoke of pain, its peculiar character and location, purulent discharge, and tenderness on pressure over the region of sinuses.

"Treatment"—by Dr. M. A. Goldstein. The doctor described the different operative methods used to secure drainage, washing out and curettement.

"Ocular Signs and Complications"—by Dr. John Green, Jr. Dr. Green spoke of the inflammation of the orbit, exophthalmus, inflammation of the optic nerve, paralysis, either partial or complete, of one or more extra-ocular muscles, edema of the lids, etc.

Discussion by Drs. Shields, James, Jennings, Buckwalter, Funkhouser, Henderson, Saner, and Shattinger.

The following delegates to the Missouri State Medical Association were elected: Drs. P. Y. Tupper, J. S. Meyer, J. C. Morfit, W. W. Graves, W. H. Stauffer, W. B. Dorsett, C. A. Snodgras, F. L. Henderson, H. W. Soper, John Green, Jr.

I. E. GRAHAM, Reporter.

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#### JOHNSON COUNTY MEDICAL SOCIETY.

Johnson County Medical Society met in Warrensburg, March 13th. Regular business of the society was transacted as usual. The society voted to have the annual banquet on or about the date of the next regular meeting, June 12th, and committees were appointed to prepare for the same.

Resolutions were adopted to be presented to the state board of health, commending the character of our brother physicians, Drs. Shy and Raine, of Knobnoster.

The scientific program consisted of a paper on the "Treatment of Pneumonia," by Z. Case, of War-

rensburg. In this paper the essayist gave his experience of thirty years in that line. It was an excellent review of the subject. The discussion brought out quite a variety of opinions among the members as to the efficiency and safety of the ice bag and cold bath in controlling the severe symptoms of the disease.

E. H. GILBERT, Secretary.

### LAWRENCE COUNTY MEDICAL SOCIETY.

Lawrence County Medical Society met in regular session at Aurora on March 6th, the president, Dr. Harris, in the chair. There was a good attendance of members and a number of visitors from Barry, Stone, Christian and Greene counties.

The following names were presented as applicants for membership: Drs. J. H. Craven, J. P. Baird, and T. D. S. McCall of Marionville; W. S. Burney, of Miller; D. M. Huffman and E. E. Goodrich, of Crane, and D. L. Mitchell, of Cassville.

This meeting was a very interesting one throughout, the papers read being of excellent character and the discussion earnest and animated.

The following were appointed a committee on public health and legislation: Drs. W. W. Rodman, Pierce City; D. L. Mitchell, Cassville, and D. M. Huffman, Crane.

Dr. C. A. Moore was elected delegate to the state meeting and Dr. I. A. Cottingham alternate.

The next meeting will be held at Aurora on June 5th.

C. A. MOORE, Secretary.

### MISSISSIPPI COUNTY MEDICAL SOCIETY.

The Mississippi County Medical Society met in regular session, Monday, March 12, 1906, at the office of Dr. A. W. Chapman, with its president, Dr. G. R. Wallace of Bertrand, in the chair. Members present: Drs. A. W. Chapman, W. P. Howle, M. D. Hamner, R. K. Ogilvie and G. R. Wallace.

The officers for the ensuing year are as follows:

President, G. R. Wallace, Bertrand; vice president, A. W. Chapman, Charleston; secretary, R. K. Ogilvie, Charleston; treasurer, J. M. Rowe, Charleston; board of censors, J. M. Rowe, M. D. Hamner and A. J. Martin.

Dr. G. R. Wallace, of Bertrand, was elected delegate to the State meeting at Jefferson City and R. K. Ogilvie as alternate.

Drs. J. S. Davis, Whiting and Albert Willis of Birds Point were elected members.

Resolutions of respect were adopted on the death of Dr. C. A. Story, of East Prairie.

A motion was made and seconded to amend the by-laws regarding the time and meeting place of the society was laid over until next meeting. The object of this amendment is to hold the meetings monthly, instead of quarterly, and to meet in Charleston, East Prairie and Bertrand on successive months.

Resolutions were adopted endorsing the American Medical Association and the different journals on their stand regarding the patent medicine evil, and the secretary was

instructed to request the representative of Mississippi county to draft a suitable bill and introduce the same into the state legislature prohibiting the indiscriminate sale of the many quack consumption and cancer cures, etc., now menacing public health. Each member present pledged his support and influence in having such a bill passed.

The secretary sent invitations to all non-members of the society to join the local organization. In time we hope to offer enough inducements for all non-members to lay aside personal considerations and join in advancing the interests of the profession.

Among the interesting cases reported, Drs. Howle, Wallace and Ogilvie reported cases of La Grippe, Hysteria and Cysto-Pyelitis, respectively, which were freely discussed by the members.

Dr. Wallace, the new president, has the "McCormick spirit and push" and a year of good meetings and increased interest is looked for.

R. K. OGILVIE, M. D., Sec.

## PLATTE COUNTY MEDICAL SOCIETY.

The regular meeting of the Platte County Medical Society was held in Platte City, Wednesday, March 7th, Dr. A. C. Barr, the vice president, presiding. The following members were present: Drs. Barr, Patterson, Davis, Redman, Clark, and Coffey. The minutes of the previous meeting were read and approved. Dr. Spence Redman reported a very interesting case of myalgia in a young man eighteen

years of age. This brought forth a liberal discussion from several members. Dr. A. C. Barr reported a case of embolism of the brain in a man 76 years old. This case also was freely discussed and commented upon. A general discussion upon "Percussion and Auscultation of the Chest" and "Antipyetics" then followed which proved highly instructive.

The plans of the society for this year are to have a post-graduate course upon subjects instructive to all.

The program for the month of April will be "Diagnosis of Valvular Lesions of the Heart" and "Anti-rheumatics."

These meetings are becoming more and more interesting, and every physician in the county is urged to attend.

The next meeting will be held in Platte City on the first Wednesday in April.

G. C. COFFEY, M. D., Secretary.

## STE. GENEVIEVE COUNTY MEDICAL SOCIETY.

MEETING OF FEBRUARY 14.

The Ste. Genevieve County Medical Society held its regular monthly meeting on February 14th, the president, Dr. Moore, in the chair. The minutes of the last meeting were read and approved. Members present: Drs. Moore, Hinch, Rutledge, Morganstern and Lanning.

Dr. Moore reported a case of subpleural abscess which presented many difficulties in arriving at a positive diagnosis. The patient, an adult male, had pneumonia of right lung, the crisis apparently normal,



but in a couple of days the temperature returned and varied for ten days. A pleural exudate had formed which on aspiration showed sero-purulent matter. Several days later aspiration was again performed and fluid of the same nature withdrawn. Paracentesis was then done in the anterior axillary line with subsequent drainage. The patient improved somewhat but not continuing to do so, it became necessary to resect a portion of the sixth rib to secure better drainage. Improvement again took place and the pleural cavity had almost healed when recrudescence of fever and loss of strength and flesh, gave the case an unfavorable turn. Auscultation revealed absence of respiratory murmur and percussion showed dullness of the lung in the vicinity of the resected opening and it was concluded that pus must still be there. About this time the patient had a spell of coughing and brought up large quantities of pus, convincing the doctor that there was an abscess in the right lung and that it must be located beneath the site of the resected opening. With an aspirating needle the abscess was located through the opening made previously into the pleural cavity, a grooved director was passed along the needle and a long slender bistoury carried on this to the abscess cavity, when pus gushed forth. A drainage tube was inserted and parts dressed. From this time the patient made a rapid and uneventful recovery. The doctor's opinion was that the abscess of the right lung developed subsequently to the pneumonia and was prior in origin to the empyema; that the empyema

developed secondarily to the abscess of the lung by metastasis.

Dr. Hinch's paper on "Lodge and Contract Practice" was timely and impressed the members that the only way of correcting the evil was for the profession to organize and work as a unit, and that it was up to them to get in line and correct the practice, just starting in our midst, in its inception.

Reports of committees were heard. Committee on fee-bill was instructed to revise the same for the next meeting. The secretary was instructed to notify all members to be present at the next meeting to consider a resolution to be offered on "Lodge Practice" and also matters of professional business interest. No objections being offered, the hour of meeting was changed to 8:30 a. m. on the second Wednesday of each month, thus giving all members a better opportunity to be present.

#### MEETING OF MARCH 14.

The Ste. Genevieve County Medical Society held its regular monthly meeting on Wednesday, March 14th, the president, Dr. Moore, in the chair. Members present: Drs. Wilkins, Hinch, Morgansteen, Moore, Hertich, Rutledge, Jarvis and Lanning. Minutes of the last meeting were read and approved.

Dr. Morgansteen read an extract from an address to the Civic Club of Philadelphia, Pa., on "Nostrum Evil Laid at the Door of Physicians." Afterwards he read a paper on "Quackery" as applied to boastful individual pretensions and the advertising of nostrums to the laity in the cure of diseases.

The following preamble and reso-

lution on lodge contract practice was read:

"Whereas, it having come to our knowledge that it has become a custom among many of the fraternal organizations and societies to contract with a physician or physicians usually members of their orders or societies, to obligate themselves as physicians to attend the sick members thereof, under contract, at a price regulated and determined by the society or order, such price or remuneration being much less than that charged for similar services in the same community, thereby debasing and degrading our noble professions, therefore, be it

Resolved: That the Ste. Genevieve County Medical Society condemn such contract practice and that its members hereby agree and declare that they will not enter into such a contract with any lodge, society or association under any circumstances whatever, except to act as examiners for candidates for membership thereof."

On motion, duly seconded, the resolution was unanimously adopted as read.

The application of Dr. J. M. Shirley for membership was received and laid over for action at the next meeting. The society having a fee bill to consider (which was later adopted) and no further business appearing, adjournment was taken until the second Wednesday in April at 8:30 a. m.

R. W. LANNING, Secretary.

## STODDARD COUNTY MEDICAL SOCIETY.

Stoddard County Medical Society held its regular bi-monthly session at Bloomfield, on Wednesday, March 2nd, at 1 p. m. In addition to the usual routine business, a voluminous report was made by the committee on public health and legislation concerning violations of the Medical Practice Act in this county. The report, which showed careful and thorough investigation on the part of the committee, was received and the secretary was instructed to inform the prosecuting attorney that the society believes enough evidence has been furnished the committee to justify prosecution.

Dr. T. C. Allen read a paper on "Malarial Infection of the Fœtus in Utero," with report of a case. A general discussion followed which was very interesting.

Dr. H. S. Winters, presented a case for diagnosis. After discussion, Dr. Corbin was asked to take an x-ray photo of the limb and report at the next meeting. The scientific program at the next meeting will consist entirely of a quiz on the anatomy, physiology and pathology of the abdominal viscera.

The next meeting will be held in Puxico, May 9th.

JOHN ASHLEY, M. D., Sec.

## BOOK REVIEWS.

History of Medicine, with the Code of Medical Ethics. By Nathan Smith Davis, A. M., M. D., LL. D., Emeritus Dean and Professor of Medicine, Northwestern University Medical School, Chicago. Cleveland Press, Chicago.

From 1892 to 1897 the author gave to the senior class of the Northwestern University Medical College each year a course of lectures on the history of medicine from the earliest periods of which we have any record to the present time. The origin and progressive development of the various branches of medical science and practice and their intimate connection with the progress of all other departments of human knowledge are traced with clearness and accuracy. This volume has been written from notes used in the lecture room. The author consented to the publication of these notes in the hope that they might attract the attention of both students and practitioners of medicine and thereby diffuse a better knowledge of the origin, progress, and present status of the true science and art of Medicine.

The Signs of Internal Diseases, With a Brief Consideration of the Principles thereof. By Pearce Kintzing, B. Sc., M. D., Professor of Physical Diagnosis and Diseases of the Heart, Maryland Medical College. Illustrated. Cleveland Press, Chicago, 1906.

This volume is the practical result of the class room first in-

tended for the author's own students, it has gradually been elaborated to its present commendable proportions. While the subject matter is old, yet it is presented in a new, attractive, and original manner which makes it a work of real worth. Technicalities are avoided and the simple way always used when it sufficed. In this way the book is one of genuine value to the student in physical diagnosis.

The Diseases of Infancy and Childhood. By L. Emmett Holt, M. D., Sc. D., LL. D. Professor of Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York. With two hundred and forty-one illustrations including eight colored plates. Third edition, revised and enlarged. New York and London. D. Appleton and Company, 1906.

The rapid progress which is being made in medicine, especially in pediatrics, renders frequent revision necessary if the author would present to his readers existing knowledge in his department of medicine. In this revision the needs of the student and practitioner rather than the specialist have been considered. The purpose has been to restrict the volume to its own particular field omitting much which is fully treated in works upon pathology, general medicine and surgery. Therefore certain chapters have been abridged while others have been expanded. Especial pains have been taken with the illus-



trations which are of great value in both clinical and pathological conditions. Many of the old ones have been replaced by better ones, and twenty-five new illustrations have been introduced. While every chapter has been rewritten, and some appearing for the first time in this edition, the principle changes have been made in the following articles: Examination of the Sick Child, Hypertrophic Stenosis of the Pylorus, Diarrheal Diseases and Dysentery, Vaginitis, Cerebro-Spinal Meningitis, Mental Defects, Chondro-Dystrophy, Status Lymphaticus, and Diphtheria.

This volume supplies the every day need of the physician who practices among children and as such should be the daily companion of him who is preparing himself as a specialist in pediatrics.

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International Clinics. Edited by A. O. J. Kelly, A. M., M. D., Vol. IV. Fifteenth Series. 1906. Philadelphia and London. J. B. Lippincott Company.

The latest volume of this most excellent publication contains twenty-five articles by the best clinicians in this country and Europe. The branches receiving attention are Treatment, Medicine, Surgery, Obstetrics and Gynecology, Ophthalmology, and Pathology. Among the papers are: The Treatment of Psoriasis, by William S. Gottheil, M. D. The Treatment of Some Common Gastric Disorders, by Norman B. Gwyn, M. D. Empyema, with a report of thirty cases, by J. N. Hall, M. D. The Later Stages

of Cirrhosis of the Liver, by Sir Dyce Duckworth, M. D., LL. D. The results of operations, such as Gastroenterostomy, Pyloroplasty, etc., in the treatment of diseases of the stomach, by John B. Deaver, M. D. Phlebitis, Thrombosis, and Embolism Following Abdominal and Pelvic Operations, by William A. Edwards, M. D. The Study of the Clinical course of Joint Tuberculosis by means of the X-Rays, by Albert T. Freiberg, M. D. The Etiology and early Diagnosis of Acute Peritonitis, with the report of Illustrative Cases, by Benjamin T. Tilton, M. D. The Diagnosis of Surgical Diseases of the Kidney, by J. Garland Sherrill, A. M., M. D. A Study of Ectopic Pregnancy, with a Report of twenty-seven cases, by Thomas A. Ashby, M. D. Sixty Cases of Extra-Uterine Pregnancy, by Franklin S. Newell, M. D. Pelvic Hematocele and Hematoma, by Cuthbert Lockyer, M. D. (Lond.) B. S., F. R. C. S. (Eng.) The Medical Treatment of the Menopause, by Reynold Webb Wilcox, M. D., LL. D. Syphilitic Neuritis of the Optic Nerve with Impending Blindness successfully treated with calomel injections, by Louis Jullien, B. D. A Contribution to the Study of Eosinophilia, by Charles E. Simon, M. D. These articles are well illustrated with plates and figures with one colored plate on Psoriasis. These papers are original, well prepared, and well written, making them of much more value than the ordinary clinical lectures. The careful reading and study of the same will be of great aid to the profession.

# County Societies in Affiliation with the State Medical Association

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair.....	James Hanks.....	Brashear.....	E. C. Grim.....	Kirksville.....
Andrew.....	D. B. Bryant.....	Savannah.....	C. O. Jeffries.....	Savannah.....
Atchison.....	W. G. Stafford.....	Tarkio.....	A. McMichael.....	Rockport.....
Audrain.....	C. A. Rothwell.....	Mexico.....	E. S. Cave.....	Mexico.....
Barton.....	G. D. Allee.....	Tamar.....	I. L. McComb.....	Lamar.....
Bates.....	I. R. Coulson.....	Spruce.....	E. N. Chastain.....	Rich Hill.....
Benton.....	G. S. Greeson.....	Lincoln.....	S. O. Davis.....	Warsaw.....
Boone.....	I. E. Thornton.....	Columbia.....	W. A. Norris.....	Columbia.....
Buchanan.....	P. I. Leonard.....	St. Joseph.....	Chas. W. Fasset.....	St. Joseph.....
Butler.....	I. L. Norwine.....	Poplar Bluff.....	Ira W. Seibold.....	Poplar Bluff.....
Caldwell.....	R. K. Dodge.....	Palo.....	Tinsley Brown.....	Hamilton.....
Callaway.....	I. F. Harrison.....	Fulton.....	Martin Yates.....	Fulton.....
Camden.....	G. M. Moore.....	Linn Creek.....	G. T. Myers.....	Marks Creek.....
Cape Girardeau.....	H. L. Cunningham.....	Cape Girardeau.....	I. D. Porterfield, Jr.....	Cape Girardeau.....
Carroll.....	W. C. Baird.....	Bogard.....	R. F. Cook.....	Carrollton.....
Carter-Shannon.....	F. Hyde.....	Eminence.....	I. A. Chilton.....	Van Buren.....
Cass.....	G. W. Farrow.....	East Lynne.....	W. F. Chaffin.....	Ravmore.....
Cedar.....	Kimball Hill.....	El Dorado Springs.....	I. W. Dawson.....	El Dorado Springs.....
Chariton.....	J. R. Gaines.....	Mussel Fork.....	C. A. Jennings.....	Salisbury.....
Clark.....	H. W. Harris.....	Winchester.....	A. C. Brides.....	Kahoka.....
Clay.....	L. J. Jones.....	Linden.....	F. H. Matthews.....	Liberty.....
Clinton.....	John Sturgis.....	Perrin.....	E. A. Collev.....	Plattsburg.....
Cole.....	G. E. Mueller.....	Jefferson City.....	A. W. McAlester.....	Jefferson City.....
Cooper.....	O. W. Cochran.....	Gooch Mill.....	I. R. Lionberger.....	Bonnyville.....
Crawford.....	W. A. Metcalf.....	Steelville.....	A. H. Horn.....	Steelville.....
Daviess.....	W. L. Brosius.....	Gallatin.....	M. A. Smith.....	Gallatin.....
Dunklin.....	N. F. Kellev.....	Kennett.....	G. L. Johnson.....	Kennett.....
Franklin.....	H. A. Booth.....	Pacific.....	A. C. Brown.....	Moselle.....
Gasconade-Maries-Osage.....	I. J. Ferrell.....	Owensville.....	I. W. Newer.....	Lois.....
Gentry.....	G. W. Whiteley.....	Albany.....	J. N. Conrad.....	Albany.....
Greene.....	G. W. Barnes.....	Springfield.....	Robt. M. Cowan.....	Springfield.....
Grundv.....	N. E. Sutton.....	Trenton.....	W. H. Winingham.....	Trenton.....
Harrison.....	A. H. Vandivert.....	Bethany.....	W. H. Wiley.....	Ridgeway.....
Henry.....	H. Benway.....	Deepwater.....	R. D. Haire.....	Clinton.....
Holt.....	C. L. Evans.....	Oregon.....	T. F. Chandler.....	Forest City.....
Howard.....	V. O. Bonham.....	New Franklin.....	C. W. Watts.....	Fayette.....
Howell.....	A. H. Thomson.....	Lanton.....	A. H. Thornburgh.....	West Plains.....
Iron.....	R. W. Gay.....	Ironton.....	Ira A. Marshall.....	Ironton.....
Jackson.....	Robt. T. Sloan.....	Kansas City.....	May Goldman.....	Kansas City.....
Jasper.....	J. D. Pifer.....	Ionlin.....	R. M. James.....	Ionlin.....
Jefferson.....	T. I. Bradley.....	DeSoto.....	H. Will Elder.....	DeSoto.....
Johnson.....	W. H. Farrar.....	Warrensburg.....	E. H. Gilbert.....	Warrensburg.....
Knox.....	J. S. Brown.....	Edina.....	Henry I. Jergen.....	Edina.....
Laclede.....	I. C. Jacobs.....	Conway.....	P. T. Pritchett.....	Lebanon.....
Lafayette.....	P. S. Fulkerson.....	Lexington.....	C. T. Ryland.....	Lexington.....
Lawrence.....	J. A. Harris.....	Mt. Vernon.....	C. A. Moore.....	Aurora.....
Lincoln.....	S. R. McKay.....	Troy.....	Wm. P. Smith.....	Troy.....
Linn.....	J. W. Mason.....	Brookfield.....	Foster Burke.....	Laclede.....
Livingston.....	I. E. Tracy.....	Chillicothe.....	J. F. Cherrington.....	Chillicothe.....
McDonald.....	F. F. Doty.....	Anderson.....	M. J. Sellers.....	Anderson.....
Macon.....	W. H. Miller.....	Macon.....	C. W. Reagan.....	Macon.....
Madison.....	A. C. Anthony.....	Fredericktown.....	S. C. Slaughter.....	Fredericktown.....
Marion.....	Richard Schmidt.....	Hannibal.....	H. L. Banks.....	Hannibal.....
Mercer.....	H. P. Chesmore.....	Princeton.....	C. R. Buren.....	Princeton.....
Miller.....	S. P. Hickman.....	Uman.....	G. D. Walker.....	Eldon.....
Mississippi.....	G. R. Wallace.....	Bertrand.....	R. K. Ogilvie.....	Charleston.....
Moniteau.....	T. M. Robertson.....	Latham.....	W. R. Patterson.....	Tipton.....
Monroe.....	S. M. Brown.....	Monroe City.....	M. C. McMurry.....	Paris.....
Montgomery.....	I. L. Jones.....	Jonesburg.....	W. M. Wheeler.....	High Hill.....
Morgan.....	W. L. Hatler.....	Barnett.....	I. T. Beale.....	Versailles.....
New Madrid.....	Wilton O'Bannon.....	New Madrid.....	C. W. Watson.....	New Madrid.....
Newton.....	R. L. Willis.....	Neosho.....	Horace Bowers.....	Neosho.....
Nodaway.....	E. R. Anthony.....	Marville.....	L. E. Dean.....	Maryville.....
Pemiscot.....	I. C. Luten.....	Caruthersville.....	John Johnson.....	Hayti.....
Perry.....	T. M. Hudson.....	Perryville.....	F. M. Vessells.....	Perryville.....
Pettis.....	W. C. Overstreet.....	Sedalia.....	W. J. Ferguson.....	Sedalia.....
Phelps.....	W. H. Bruer.....	St. James.....	S. L. Bausinger.....	Rolla.....
Pike.....	M. O. Biggs.....	Bowling Green.....	T. Guy Hetherlin.....	Louisiana.....
Platte.....	C. H. Chastain.....	Weston.....	G. C. Coffey.....	Platte City.....
Pulaski.....	W. L. Ragan.....	Richland.....	G. W. Orrick.....	Crocker.....
Putnam.....	C. H. Carryer.....	Hartford.....	T. A. Townsend.....	Unionville.....
Ralls.....	W. S. Harwood.....	Rensselaer.....	T. J. Downing.....	New London.....
Randolph.....	G. O. Cuppaidge.....	Moberly.....	W. M. Dickerson.....	Renick.....
Ray.....	L. D. Greene.....	Richmond.....	E. F. Hiedon.....	Richmond.....
Reynolds.....	I. M. Lowrey.....	Centerville.....	T. W. Chilton.....	Corridon.....
Ripley.....	S. A. Proctor.....	Doniphan.....	J. F. Redwine.....	Doniphan.....
Saline.....	D. C. Gore.....	Marshall.....	D. F. Bell.....	Marshall.....
St. Charles.....	I. R. Mudd.....	St. Charles.....	B. K. Stumberg.....	St. Charles.....
St. Clair.....	W. Cline.....	Appleton City.....	E. D. Miles.....	Osceola.....
St. Genevieve.....	C. Moore.....	St. Marvs.....	R. W. Lanning.....	St. Genevieve.....
St. Louis.....	Geo. Homan.....	Odd Fellows Building.....	Hart Godloe.....	Vanol Building.....
St. Louis Co.....	Howard Carter.....	Webster Groves.....	R. D. Moore.....	Central.....
Schuyler.....	J. T. Jones.....	Queen City.....	H. E. Gerwig.....	Downing.....
Scotland.....	A. L. Davis.....	Arbela.....	O. F. Pile.....	Memphis.....
Shelby.....	L. W. Dallis.....	Hunnewell.....	A. M. Wood.....	Lentner.....
Stoddard.....	D. R. Corbin.....	Bloomfield.....	John Ashley.....	Bloomfield.....
Sullivan.....	J. C. Kessinger.....	Milan.....	J. S. Montgomery.....	Milan.....
Vernon.....	E. A. Dulin.....	Nevada.....	T. B. Todd.....	Richards.....
Warren.....	W. J. Alexander.....	Marthasville.....	E. A. Fluesmeier.....	Wright City.....
Washington.....	J. A. Eaton.....	Belgrade.....	W. S. Smith.....	Belgrade.....
Wayne.....	J. P. Sebastain.....	Patterson.....	R. I. Owens.....	Mill Spring.....
Worth.....	O. H. P. Mills.....	Grant City.....	J. K. Phipps.....	Grant City.....

# MEETINGS OF THE COUNTY MEDICAL SOCIETIES

County.	Date of Meeting.
Adair.....	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew.....	Monthly. First Wednesday.
Atchison.....	Quarterly. January, April, July, October.
Audrain.....	Monthly. First Monday.
Barton.....	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates.....	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Benton.....	Quarterly. First Tuesday, January, April, July, October.
Boone.....	Monthly. First Monday.
Buchanan.....	Semi-Monthly. First and Third Saturday.
Butler.....	Monthly. Last Friday.
Caldwell.....	Quarterly. July, October, January, April.
Callaway.....	Monthly. Second Thursday.
Camden.....	Quarterly. Second Monday, April, July, Oct., and Jan.
Cape Girardeau.....	Monthly. Second Wednesday.
Carroll.....	Monthly. Second Tuesday.
Carter-Shannon.....	Quarterly. February, May, August and November.
Cass.....	Quarterly. First Thursday of March, June, Sept. and Dec.
Cedar.....	Monthly.
Chariton.....	Monthly. Last Thursday.
Clark.....	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay.....	Monthly. Last Monday.
Clinton.....	Monthly. First Tuesday.
Cole.....	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper.....	Monthly. First Tuesday.
Crawford.....	Quarterly. First Tuesday, April, July, October, January.
Davies.....	Quarterly. January, April, July, October.
Dunklin.....	Monthly. Second Tuesday.
Franklin.....	Monthly. First Tuesday.
Gasconade-Maries-Osage.....	Semi-Annual. Fourth Thursday, April and October.
Gentry.....	Monthly.
Greene.....	Semi-Monthly. Second and Fourth Friday.
Grundy.....	Quarterly. July, October, January, April.
Harrison.....	Quarterly. Third Tuesday, January, April, July, October.
Henry.....	Quarterly.—Second Wednesday, Dec., March, June, Sept.
Holt.....	Quarterly.—First Thursday, January, April, July, October.
Howard.....	Monthly. First Friday.
Howell.....	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron.....	Monthly. First Saturday.
Jackson.....	Semi-Monthly. Second and Fourth Thursdays.
Jasper.....	Semi-Monthly. First and Third Mondays.
Jefferson.....	Monthly. Fourth Tuesday.
Johnson.....	Quarterly. June, September, December, March.
Knox.....	Monthly. First Monday.
Laclede.....	Quarterly. Second Monday, Jan., April, July, Oct.
Lafayette.....	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lawrence.....	Monthly.
Lincoln.....	Quarterly. May, August, November, February.
Linn.....	Quarterly. October, January, April, July.
Livingston.....	Monthly. Third Wednesday.
McDonald.....	Quarterly. Second Wednesday, Jan., April, July, Oct.
Macon.....	Monthly. Second Tuesday, 10 a. m.
Madison.....	Semi-Monthly. First and Third Tuesday.
Marion.....	Monthly. First Friday.
Mercer.....	Monthly. Second Thursday.
Miller.....	Quarterly. First Thursday, March, June, Sept., Dec.
Mississippi.....	Monthly. First Monday.
Moniteau.....	Quarterly. March, June, September, December.
Monroe.....	Quarterly. First Tuesday of April, July, October, January.
Montgomery.....	Monthly.
Morgan.....	Quarterly. First Wednesday of March, June, Sept., Dec.
New Madrid.....	Monthly.
Newton.....	Monthly. Second Tuesday.
Nodaway.....	Monthly. Second Tuesday.
Pemiscot.....	Quarterly. First Tuesday, January, April, July, November.
Perry.....	Monthly. First Wednesday.
Pettis.....	Semi-Monthly. First and Third Monday.
Phelps.....	Quarterly. March, June, September, December.
Pike.....	Monthly.
Platte.....	Monthly. First Wednesday.
Pulaski.....	Quarterly. November, February, May, August.
Putnam.....	Monthly. First Wednesday.
Ralls.....	Quarterly. January, April, July and October.
Randolph.....	Monthly. Second Tuesday.
Ray.....	Monthly. Third Wednesday.
Reynolds.....	Quarterly. January, March, June, October.
Ripley.....	Monthly.
Saline.....	Monthly. Second Tuesday.
St. Charles.....	Monthly.
St. Clair.....	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve.....	Monthly. Second Wednesday.
St. Louis.....	Weekly. Saturdays.
St. Louis County.....	Monthly. Second Wednesday.
Schuyler.....	Semi-Annually. July and December.
Scotland.....	Monthly. Second Tuesday.
Shelby.....	Quarterly. June, September, December, March.
Stoddard.....	Bi-Monthly. First Wednesday, Jan., Mch., July, Sept., Nov.
Sullivan.....	Monthly.
Vernon.....	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren.....	Monthly.
Washington.....	Monthly. First Saturday.
Wayne.....	Monthly.
Worth.....	Monthly. Second Wednesday.



# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

Volume II

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## ORIGINAL ARTICLES

### PUBERTY—ITS BENEFITS AND DANGERS.\*

BY E. H. MILLER, M. D., LIBERTY, MO.

In dealing with this subject I do not speak of it in the light of a specialist who has to deal with the individual symptoms as they manifest themselves and have been referred to them as learned in that particular line of diseases; but I speak of it as it appears to me as a country practitioner, who must grasp every ailment flesh is heir to, and trace it to its special cause, deciding at once whether it is reflex or organic. In the limited time allotted to me I ought to touch only on the subject as it relates to the female alone, as in my judgment much could be written on this subject, gleaned from an experience of thirty years with the mothers and fathers who herald this period in the child's life as a turning stone that leads to a future of health and happiness or of sickness and misery. But our boys should be just as carefully guarded at this period of their lives as our girls, for it, too, for them moulds a life either for renown or failure. The laity speaks of puberty hardly ever in connection with the boys, but with the girls as the time when menstruation commences. If

this can be started right, they fear very little so far as this period bears on the general make up of the child. If a child grows pale and lifeless, careless and indifferent, morose and really sick, they attribute it all to the age, and never look farther for a cause of the trouble, hoping nature, by and by, will right it all when manhood or womanhood dawns on life's horizon. Every day this condition confronts the general practitioner who sees these evidences of approaching diseases creeping on the organism of many of our brightest boys and girls and not a hand being lifted to help them commence the struggle up life's highway, by removing the obstacle to health and happiness.

To the physician, puberty means more than this to the human organism. It means a time of life when the whole landscape changes; when old ideas are laid aside and new ones are thrust into their lives; when the world looks different and it begins to dawn on them what their true aim in life is, and the past with the protection of father and mother must be laid aside and the responsibilities

\*Read by title at the annual meeting, Missouri State Medical Association, Excelsior Springs, May, 1905.

of life must rest on their shoulders; when a new set of nerves and muscles have been called into action, and the guiding of these shapes the whole future of their beings. 'Tis a trying time in life, and the more I study it, the more I am convinced that many a life is wrecked at this turn in the road that might have been saved by the timely aid of the family physician. I will not attempt to go into the development of the muscles, arteries, nerves and bony structure of the body. How they each take on new activity at this period, leaping, as it were, from childhood to manhood in a few months. How the voice, actions, thoughts and living are completely revolutionized, for these are observed by each of you, but I will try to point out some of the blessings puberty brings to the youth, as well as a few dangers that hang around this period.

Take a boy or girl born of healthy parents with surroundings good and comfortable who ought to grow on and on with each coming year, yet he stops the upward movement without any appreciable cause—*just stops*. Puberty steps in and offers a reason for it all. No steps are taken to arrest the downward tendency, still age tells the parent something must be done. Oftentimes it is too late, but this stage in life often shows that some disease is working its way, and the youth is at least given a chance to have this condition, whatever it may be, corrected. Fortunately for him this time has arrived, and its arrival is a blessing to him. It must be evident to all that this period seems either to de-

velop any dormant organic trouble that may exist in the body, or it turns the green gawky boy or girl into a studious and interesting young man or woman.

There is no boy or girl who does not look forward with a great deal of pleasure to the day when childhood leaves its cloak at their feet and they step out into the new world of manhood and womanhood. That is what puberty means. Now with this bright idea before them, with all its hopes and expectations, without a word from anyone they form their own ideas of its approach and functions, and what must be their thoughts when they find their castles shattered and their expected functions never appear.

Do you think it means nothing to them should they find that they are different from others of the same age? Do you think deformity means nothing to them? But it does play an active part in all our neurotic diseases, and its effects on the nervous system are sure and lasting, oftentimes blighting the life of many a youngster. Some reflex phenomena are recognized by every occur in approaching womanhood, but we are blind to them when they physician, and circumcision is often resorted to before youth is past. Yet we so often look no further for the cause of reflex phenomena that are so much more positive and lasting than those which have their origin in the prepuce. This is to our discredit, for I have often seen patients taken to a specialist who easily traced the effect to the cause, and this corrected, our patient entered upon a new life. We might as well



discover an abnormal condition at the age of sixteen as at the age of twenty-five. Just think for a moment how positive are the remote symptoms should an injury be sustained to the testis in maturer years, then we should not wonder at the nervous impressions made by the changes nature makes and often are obstructed in the same organ during the early stages of puberty.

The reflexes of uterine disorders during womanhood are apparent, hiding behind the blind of modesty and virgin purity. In my mind, it is criminal neglect of the family physician. All organs are sacred to him and having control of the entire patient, he might as well neglect an approaching pneumonia as an incipient utrine or ovarian trouble.

Menstruation is a physiological act and should not be painful or produce any special influence on the general system. But what is to be done if its approach is heralded by pain, headache or violent convulsions? It then becomes pathological and should be looked into just as well as if it were any diseased condition. Wait—wait—wait—is the cry that comes from mother and father, and often heartily sanctioned by physician. Wait till puberty places her stamp upon her young life, then if she is no better, we will ask you to do something. Often this waiting is the scar left, never to be erased during her whole life.

This is peculiar language to many of my city friends but it is a perfect portrayal of life as it presents itself to us as family physicians.

I accompanied a mother and daughter,—patients of mine,—to

see one of the best practitioners in the West, (in my judgment), and after looking over the case, getting its history, etc., he frankly told us: "the case was out of his line; to go to Dr. So-and-so for advice." It is to obviate this dilemma that I offer this paper, and hope by it to try and show how we can avoid such awkward conditions as the above, yet save our patients from a future life of invalidism, often. The conditions that happen to our boys are many that throw a damper on their lives. But there is one condition new to me, yet I am sure often happens, I find, after looking the matter up. The following case will explain this better than anything else:

M. W.,—age 15. Father and mother healthy; brothers and sisters all healthy; this boy was bright in his school work, a model in his habits and quite a society lad. He graduated in the high school in his native city and stood second in his class; commenced his college career with colors bright. He was a club boy and every one predicted a bright future for him. But gradually he commenced to change without any cause whatever. He shunned, little by little, the companions of his early life both male and female. He gradually took less interest in his dress, and finally, remained in his room a great deal of his time. His parents attributed his altered condition to advancing years and hard study. Every one noticed his pallid looks and the decline in his health, yet his inability to sleep made him at last consult me for aid. I advised exercise and less study and the



usual tonics and remedies, all to no good, until his complete collapse made me lay aside reserve and attack the inner aspect of his life and thought and, winning his confidence, he told me the obstacle (under an oath of secrecy) that had worked on his mind so long that its influence had sapped the very foundation of his every object and aim in life. He dwelt long on his ambitions for the future, his hopes of success, his ideal of a home and a companion to share his wealth and honor with him when school days were over and his true position in society was accorded him, and all that goes to make life worth the living. When one day he found he was deficient in his generative organs, different from *all* his companions,—and with this knowledge before him his bright dreams vanished and with them the stimulus for action in any direction. Of course, I argued, gave every thing I could, yet the cause of it all was too evident to be denied. Well, to make a long story short, he left me, went home, consulted an eminent surgeon in one of our northern cities who operated on him for a testicle that had been stopped in its descent into the scrotum, and the boy was under the impression that he had no testicles, and consequently could never know what a home meant. This testicle was brought down into its natural position, or at least, until it was visible, and the block to the wheel was removed and the road of life was opened anew. This man invited me not long ago to his wedding and asked me to come and see the transition from death, as he termed

it, to life with all its charms and beauties.

Now this is no overdrawn picture, but it has taught me a valuable lesson, namely: to look more carefully into the inner lives of the boys around me, and whenever I see a decline in any direction in the growth of any one of them, I never let up until I find the cause and oftentimes save a bright boy from ruin. I will not worry you with the cases I have in mind illustrative of this expression, but give this one so pointed and plain to beg you to stop and think how the question so often asked might be answered by a neglect of attending to some of the irregularities of nature which manifest themselves in our youths about puberty. The query I refer to is: What becomes of so many of our bright and brilliant children?

This is no overdrawn picture; if you will reflect, you will remember how many bright boys, the pride, not only of their own families, but of the whole community in which they live, stop in their upward career and, without any cause, change into idle, indifferent and loafing boys. Often the summer-time of life is a failure to him, indeed. His physical defects, often known only to himself, at first cast only a shadow on his life, but deepens as his year advances and puberty, with all its hopes and aspirations, ends in disappointments, until at last a cloud hovers over him which he cannot lift or see through. Then comes the end, sad and full of remorse, a monument to the indifference of his physician and the ignorance of his parents. His very age ought to place us on our guard as to the cause of it all,

and oftentimes by demanding a thorough examination we discover it, whatever it may be, and by an operation often very simple, we change his life in toto, make a man out of him instead of an imbecile. His ailment may be simply neurotic, yet the results are just as positive as if the lesion were organic. I will not multiply cases in proof of the above condition, nor will I go into a long scientific analysis of the causes and effects of the abnormalities that happen to boys, but I must dwell on the effects that any one of them seems to have on their nervous system and through these upon the whole organism.

Now if this be true of our boys, what must puberty mean to our girls whose nervous system is doubly tuned to the music of brighter years, whose whole life seems to have but a single aim, and that is "to prepare herself for the position God in His infinite wisdom has prepared for her" to care for the hearths and homes of our land. Her pictures of the future are painted in far more brilliant colors than those of our boys. Her ideal of life must be a perfect one, and in early childhood her mimic of those of maturer years shows the tendency of her life,—she longs for the age of puberty. Yet she does not know why she dreams of a home of her own and in fancy paints it as none but herself can do. In fact the heart and soul of growing childhood is the criterion by which we judge the larger heart and soul of mature womanhood. Now what must be the feeling to a sensitive nature like hers to find in the very dawn of her new life, when she

looks over the new horizon, a faulty mechanism in her being. When from the very center of her nervous system comes the grating of ill-proportioned organs. Do you wonder at the reflexes these pathological conditions produce? Yet we sit by, family advisers, and see disease get a stronger hold on our girls and never say why. "All due to puberty; nature will soon right this evil and give her health and happiness," we so often say.

I once heard a physician say that he had practiced medicine for forty years and in all that time he had never examined a girl's pelvic organs before she was married. I throw the mantle of charity over the life of that man, and, thank the Lord, his career as a physician is about over. He is wealthy and has retired. I make no comments when he censures me for saying: "I know no age when sickness confronts me."

I would be out of place to bring before you the vices of puberty and their many sequelae, and also the diseases brought about by carelessness and disobedience, but only such pathological conditions as often are found with no known cause, and which are consequently overlooked and their results are not heeded by either parent or physician. If menstruation is physiological, it should appear in due time with no special set of symptoms, then its absence or its appearance with much pain and constitutional disturbances is pathological and as such should be looked after as any other disturbance. I do not mean its irregularity at first, when the girl says she feels all right and her looks and



actions show that she does. I do not mean that her innate modesty and retired feelings should be ruthlessly broken down and our presence thrust upon her for any and every irregular condition; for there is no regular standard to guide us, as each case stands on its own particular condition. But I do say that neither age nor sex should stand between us and the duty we owe to those families whose physical welfare is entrusted to our keeping. We should advise our girls as to exercise at the proper time and of the proper kind, as to their schooling; every avenue of social life should be guarded and watched, and when puberty begins, our eyes often can see the changes for good or bad far better than parents who naturally are looking for some trouble then and pay no attention to the condition that might, if neglected, close the castle of health to her forever. These conditions are many, but I will report a few cases to bring out my meaning in the above language.

Miss K—A bright girl; father and mother both healthy; grew to the age of thirteen, hale and hearty.—a regular romp; at this age she began to menstruate and this was accompanied by a great deal of pain and lasted ten days.—just a light flow, the last six days painless. Her health began to fail her about the fourth month. This we attributed to the menorrhagia and we gave her such remedies as we saw best suited,—we tried everything for one year as neither she nor her parents would hear to an examination which I never pressed until the last month or two of the year. She consulted many

physicians and used many remedies, patent and otherwise, but all to no purpose, until, nearly bed ridden, she consented to an examination. I found a partition half way along the vaginal tract cutting off the vagina proper from the uterus, with a very small aperture in it and the menstrual flow each month would fill up the posterior space and would take two weeks to seep through the small opening in the partition. Breaking this down remedied the evil and cured the girl.

Another girl passed through the agonies of the damned, waiting for age to correct the condition brought about by an imperforate hymen. 'Tis useless to relate her history as it is apparent to all of you what the symptoms would be. I was asked to see her by her family physician and we demanded an examination, found the evil, operated, and cured the girl.

No one can tell, no matter how learned he may be, by the locality of the pain, where the lesion is, for I have seen two of the worst cases of cystitis in girls whose urine showed no inflammatory condition in the bladder, yet the bladder was the only organ complained of. After months of suffering and after treatment by four or five physicians, when exhaustion compelled an examination, we found no bladder trouble, no urine displacement, but all came from a rectal fissure.

I have here the report of many singular experiences in my thirty years work in this line, but will not weary you by their reading. All show the value of treating our girls as if they were human and not listening to the advice of parents



who tell us of so many cases just like their daughter who were relieved and grew healthy women by the kindly act of nature with the changes brought about during puberty.

Now do not misunderstand me. I respect the modesty of maidenhood, but I have no patience with the man who hides behind it when his duty demands action. An examination does not mean a vaginal examination, as I use that route as a dernier

resort. There are few pelvic diseases that cannot be located through the rectum and it is by this opening that I depend in most of my diagnostic work.

I hope my hints, only thrown out from a multitude of facts, will explain my position, that is: The age of puberty is the age in the life of our boys and girls in which an ounce of preventative will do more than a pound of cure in later years.

## SCIENCE OF MEDICINE A LOOTED PROFESSION.\*

BY T. F. LOCKWOOD, M. D., BUTLER, MO.

This title may seem harsh, and possibly show traces of rudeness on my part in making such bold assertions, but should my remarks prove unworthy of consideration and without just cause, I am ready and willing to retract all out of place sayings and humbly beg pardon of my co-operative brethren for uttering same. It is not from selfish motives, or from a prejudicial standpoint that I impose on this learned assembly, a paper of this character, but from the standpoint of professional righteousness and integrity which are in much need of protection and must be fortified by willing recruits furnished from within our own ranks. This is my chief apology for this warranted attack.

Through long and persistent efforts of pharmaceutical manufacturers, they have purposely placed in the hands of physicians innumerable remedies which have inevitably monopolized for the manufacturers the entire drug industry. It is apparent, however, that such action on their part was prompted wholly by covetous dispositions to cover extensive territory for mercenary advantages. We no longer resort to pill-tile, pestle and mortar; we have long since forgotten the once frequent and fragrant odor of,

Horsemint, horehound, catnip tea, Pennyroyal, tansy, bark from the tree,

Ginseng, gentian, butternut pills, Bittersweet, dogwood, wahoo and squills.

Senega, butterfly and pleurisy weed, Lobelia, ipecac and mustard seed, Redroot, blackroot, bitter orange peel,

Rhubarb, calamus and Solomon's seal,

Lady slipper, sarsaparilla, dandelion,

Boneset, mandrake, hops from the vine,

And many others, easily set to rhyme.

While this may sound like a childish jingle to the arisotocratic physician of to-day, to the time-honored doctor of forty, or even thirty years ago, it sounds like music from a harp of gold played in memory of a praiseworthy profession of by-gone days, when nature was the laboratory and the doctor the apothecary. But time has changed all things. The old has given way to the new; we no longer rely on the slow process of making our own tinctures, or our own powders and our own pills. We are too hasty to undo the things that characterized the good Samaritan of long ago; we have for ever dismissed many of the good, oldtime remedies that marked in medical history epochs that should forever shine as triumphant stars in the heaven of medicine. The once brilliant minds, whose mental illuminations lighted the pathway of medicine for many years in advance,

\*Read at the meeting of the Missouri State Medical Association, Excelsior Springs; May, 1905.

have become but flickering flames in the dim vision of a remote past. The extreme has reached a painful perplexity when we submissively allow the profession of pharmacy to gradually encroach upon our rights until the science of medicine has narrowly confined itself to a few stale tinctures and musty powders found in drugstores that are no longer ideal laboratories for loyal physicians, but dispensing bureaus for patent and proprietary preparations. A few years ago, before the arrival of medical aristocracy, the drug scope of the physician was unlimited. He had the whole *materia medica* and the great volume of the U. S. Pharmacopœia to select from. To-day, he has but few remedies he may call his own. The pharmacist, in his great zeal, has formulated all remedies and the doctor has nothing left to do but to correctly diagnose his case; the treatment is ready, having been prematurely prepared, only waiting an opportunity for the agent's (the doctor) administration. This apparent generosity on the part of pharmacists may seem worthy of much praise and public comment from the standpoint of a superficial observer, but when we come to realize that many proprietary preparations put on the market are labeled for the public and not the physician; many manufacturers of such products are sampling the public through the unmindful physician, who constantly act as advertising agent for such firms; many sample packages left in the hands of physicians for free distribution, have blank labels attached, bearing the title of drug and use of same, that

the physician may write directions, signing his name, when it therefore becomes a written endorsement of the said drug therein contained. How often is the physician earnestly requested to prescribe proprietary medicine in original package to avoid substitution? If for instance you were to prescribe *celerina*, *seng*, or other preparations, in original package as directed by the manufacturers, how long would it be before the entire community would be going to the druggist for these same preparations? To induce physicians to prescribe in original bottles upon the pretense of avoiding substitution, is just the thing sought by manufacturers, not perhaps to deprive the doctor of a fee, but having in mind that numerous sales can be made to those who believe they are saving fifty cents or a dollar by buying medicine direct from the druggist. It cannot be that manufacturers have the welfare of ourselves and patients so much at heart, and that they believe their product far surpasses anything of its kind on the market, that they constantly appeal to the profession to use no other but their own, but a natural human desire for opulency prompts all such requests on physicians to advertise the products to patients, and they, subsequently, to friends and the public in general. In order that you may have a better knowledge of what I am desirous and much determined to have you understand, I shall quote a letter written by the celebrated Antikamnia Company, of St. Louis, to a layman, published in the *Medical World*.



St. Louis, U. S. A., Aug. 2, 1904.  
Mr. Jones:—

We are pleased to inclose a sample of "Antikamnia Tablets" for Pain. A sample of something good is a "good thing" to keep about the house or for convenience, in your pocket or purse.

Antikamnia tablets will relieve all headaches, muscular pains, neuralgia, la-grippe, insomnia and women's aches and ills. The inclosed booklet tells when and how many, and druggists everywhere sell them in any quantity or in our regular "Vest-Pocket-Boxes" as below.

Sincerely yours,

Antikamnia Chemical Company.

Frank A. Ruff, Pres. and Treas.

This letter is one proof among many showing advantages taken by drug dealers in making a short-cut to the goal, beating the physician to the patient and public with their remedies, leaving the doctor to wait for dangerous complications to arise in the case that will not "down" for the laudable panacea.

A physician has but little left after discharging a patient, that will distinguish him as a resourceful and self-relying practitioner who can fully enjoy the spirit of professional dignity. He is no longer a health restorer, but a disease finder. He locates disease and applies another's remedy; and he that can name the greatest variety of ailments, and apply the greatest amount of manufactured balm, is one whom manufacturers are seeking; he who treats his patients with proprietary medicine in original package, will soon find his patrons buying medicine at the drug store, using the empty bottles as prescriptions and order for same. This is false economy for the patient, money for the manufacturer

and a small percentage for the druggist. The two latter have made money and the doctor has not only lost a fee in this particular instance, but he has lost a fee for all similar ailments in that entire neighborhood. We are told that medicine has gradually advanced till it now occupies a proud position along with other great sciences. This is true in a measure only. Surgery and its varied belongings, and many revised methods of diagnosing disease, are responsible for all advancement in medicine. The microscope and x-ray have done much toward placing the science of medicine in the high position it now occupies. Much of this is done in an eager spirit to excel the past, and in so doing we have carelessly allowed the curative branch of the science to lag. The treatment of diseases has been left too much in the hands of druggists and drug manufacturers who have taken advantage of this neglected art of the healer and appropriated it to their own financial interest. You cannot enter a retail drug store without being confronted with showcase remedies for all ailments of frequent occurrence known to man. The very conditions that should furnish the doctor employment are the things sought by druggists. Corn salve and consumption cures are shown equal prominence in the same conspicuous manner in a modern drug store. Headache and dyspepsia tablets; cough and worm lozenges, pile and chill cures; diarrhoea and rheumatic remedies; eye water and toothache drops; hand lotion and skin remedies, and many other curealls, adorn the showcases

of all drug stores. But the greatest of all prepared remedies, one the druggist values very highly, is the "Big G." This is the greatest insult offered along the line of counter medication. Not satisfied with the spoils from treating three-fourths of all the ailments prevalent in the field of the physician, they must rob him of his special and specific work by prescribing a cheap cure for gonorrhœa, realizing a very small profit for himself and depriving the doctor of his profit. If the case should become serious, as many do under such treatment, proving too much for the druggist and his patent panacea, then the ill-treated and cozened physician is called to take charge of a badly managed, if not now an incurable malady, to assume the responsibility of the case which never fails to exonerate the druggist and cast the blame upon the physician for unfavorable results brought about from former treatment by inexperienced hands.

There was a time when physicians could obtain a few legitimate dollars by fitting trusses, but not so at present. Retail druggists have confiscated this financial privilege and doctors get nothing but strangulated and irreducible cases of hernia that present too much magnitude for the inexperienced druggist to undertake. Druggists are selling vaccine points with instructions how to use them and many of our patrons are doing their own vaccinating, and quite successfully too. Diphtheritic antitoxin is now put up in a common form with directions plain enough for the public to thoroughly understand, enabling any layman to treat

diphtheria, which he will do as soon as manufacturers can convince him that he possesses ability to inject the serum with desired results. It remains a matter of short duration when doctors will only be needed to diagnose diphtheria, the druggist has the remedy and the public will do the rest. Is it any wonder that druggists are addressed as doctor? It is as common to hear a druggist called doctor, as it is to hear one preacher call another brother. And they proudly accept the title without a sign of remonstrance and respond as gracefully as if they were rightfully entitled to same. With matters thus, what is there left for the unfortunate physician, but the fragments of a looted profession? Are we not very much abused in our profession by those who claim to be concomitant in endeavoring to relieve suffering humanity? Surely we have not been too tyrannical in contending for our special rights, and I do not believe I have over-drawn the line in presenting this feature of my subject. Indeed, I have, since beginning this essay, in studying closely the essentials of counter prescribing, become more astonished that we have allowed such conditions to exist so long without showing at least a disposition of resentment and disapproval. We have never registered not even one protest, consequently we are, in a degree, responsible for our present predicament. We are dictating our own professional destiny when we favor a continuance of the present system of drug store therapy. I am not condemning proprietary medicines virtually, for I believe many of them



valuable products, but I do condemn the reckless and ruthless methods manufacturers have in establishing a sale for them. Every manufacturer of drug products should harmonize with physicians in establishing and maintaining a public benefaction. The credulous community look to him who promises the quickest and safest relief, no matter whether he be a doctor or a druggist. The age of enlightenment has dawned upon the laymen as well as the professional man, so much so however, that many have become proficient in diagnosing their own ailments, and the druggist is given the pleasant and profitable task of prescribing for same. Retail druggists have been caught in this common current and drifted so far at sea, that a return to shore seems a fruitless undertaking. If they were to dump all showcase cure-all remedies into the street it would be far better for them. Patrons would obtain prescriptions from physicians and the profit on a prescription would come to more than the little commission or margin from the sale of counter goods; besides it would show professional courtesy as well as reciprocating many extended favors. Druggists are not alone to be censured for this growing practice, as many physicians who have been persuaded by proprietary manufacturers to prescribe in original form are equally guilty. It has become a custom with busy practitioners, to tell their patients to go to the drug store and purchase a bottle of Park Davis's Sodium Phosphate, or a box of Antiphlogistine, etc. This verbal prescribing is a dangerous pro-

cedure for the medical profession to indulge in as it puts these remedies into the hands of the public for future use and on a level with ordinary drug store patent medicines, causing it to become a common-place remedy in the minds of patients. Comp. acetanilid tablets, a very convenient form and a most valuable preparation in the hands of physicians, is no longer private property of the profession as every family knows what it is and what it is used for. For five cents any woman can buy a remedy at any time and at any place to cure her nervous headache and relieve it as nicely as if she had paid for a physician's prescription. Between the two customs practiced by physician and druggist we have a growing evil that will ultimately lead to professional disaster. There must be resistance offered somewhere along the course pursued by pharmaceutical manufacturers if we hope or expect to maintain a rightful share of our belongings and it is left to the general practitioner to call a halt, for the surgeon is too busy in his own interest to give much time and thought to therapeutical measures found in the medical department of our science.

Proprietary remedies on one hand and patent medicine, with its alluring advertisements in newspapers, on the other, are menacing the profession to an alarming degree. So much so that it is almost appalling to members of the profession who believe in following a legitimate and meritorious work. Such physicians as adhere strictly to conscientious scruples are taxed to their utmost to compete with such promiscuous



and extemporaneous prescribing for the sick. I believe that all disruption in the medical profession to-day is the result of too many fingers in the pudding clamoring for financial plums and desired supremacy.

The vocation of medicine has had honors as well as profits, divided with pharmaceutical manufacturers, lessening, in a marked degree, remunerative prospects for the physician. Seeing but little inducement to continue longer in general practice, I am frank to say, has caused many physicians to drift into specialism, taking refuge, as it were, in more secluded grounds, where mediating tactics of drug-makers have never yet been applied. True, however, patent medicine manufacturers have gone beyond the proprietary manufacturers in this respect, for there is not an ailment known to mankind that patent nostrums do not claim to cure.

I wish to offer a solution to this intricate problem of pharmaceutical heresy, and hope to be rewarded in the near future by seeing the system inaugurated. To restrain the nefarious custom of manufacturing chemists from flooding the community with their myriads of remedies, we cannot do it by keeping an office stock of drugs: this would compel the druggist to shove his counter goods harder in order to make his usual profit and in so doing, would supply the wants of more patients, keeping them from the physician. We cannot make a successful crusade by boycotting the drug stores, this could not bring about a favorable issue. We must reach the fountainhead in order to arrest the pro-

fusive flow. How may all this be accomplished? The medical profession should request manufacturers to remove from all containers of manufactured products everything except the title label, asking them to refrain from having the name of the drug, or of the firm, blown in bottle; to not use any peculiar or conspicuous shaped container, nothing but a plain packing bottle with a common label, as febrisol, or papine, etc., leaving off formula, medical properties, usages and dose. Label it the same as fld. ext. ergot and other common drugs. Also ask them not to publish in pamphlet such information as is now found in literature thrown broadcast over the land for the public to read, that manufacturers may profit thereby at the expense of the physician. If a drug is worthy of use it is also worth occupying its respective place in the materia medica or U. S. Dispensatory along with the great list of staple remedies found in such books. It is true such procedure would call for frequent editions of the Dispensatory, and as the expense of such revision would necessarily have to be born by those financially benefited this is the great difficulty to overcome. However, I believe the expense of such works would not exceed the enormous amount expended in printing the numerous pamphlets that are thrown into the physician's waste-basket daily. If we were to earnestly ask this concession, I truly believe it would be granted. If so, would mean a restoration of principle, privilege, patients and practice. Such reformation could not lessen

their financial income, as the public must have just so much medicine, no matter from whence it comes, and as physicians must draw supplies from drug headquarters it would ultimately reach the same financial end. If manufacturers were obstinate in granting this legitimate request then I believe the proper plan to pursue would be to petition legislature to take the matter in hands and force a final issue in behalf of human welfare and professional righteousness.

As this is merely a prelude essay, I shall not dwell longer in this lonesome field but ask that this association and the profession in general to think well of these vital questions now confronting us that we may join in a civil crusade against outside prescribing for the sick, allowing the science of medicine to revert to its rightful possessors.

#### DISCUSSION.

Dr. W. G. Moore, St. Louis:—This is so thoroughly in accord with my views that I could not remain silent and not approve it. If more men possessed the independence of thought and of action of Dr. Lockwood we would have less occasion for such papers. The principal thing he has pointed out is a boomerang; there will be more women with red noses, bleary eyes and shaky nerves as a result of this drug store business, and worse than that. Take this paper on neurasthenia this morning. You will find many of the etiological factors in drug poisoning. The neuroses and psychoses—the nervous diseases—are

largely the result of many people having a drug habit. There are no closer scrutinizers of the public weal than insurance companies and every insurance blank asks, "Are you in the habit of taking drugs of any kind?" What does that mean? It means that these men have made it a business to know how many deaths are caused by this drug habit. So far as the revenue to the general practitioner is concerned, it increases it. Give a woman a doctor's book and a thermometer and let her take nerve remedies awhile and she will be a patient as long as your conscience and her money hold out.

Dr. J. D. Brummall, Salisbury:—Owning an interest in a drug store I think there are some points I can bring out. This paper almost places patent medicines and proprietary medicines in one category. So far as the druggist is concerned they are entirely different. So far as the patent medicine is concerned the druggist is interested in selling it because the manufacturer grants the druggist a reasonable profit, but in the case of a proprietary remedy the profit is very limited and the druggist would much prefer the physician to prescribe the plain remedies or ordinary elixirs than to prescribe a proprietary remedy. There are men who after having been abroad want to publish themselves as knowing more than ordinary physicians and they will prescribe some special proprietary remedy that their druggist has that cannot be found anywhere else. It creates the impression that he is on to remedies that the ordinary physician knows nothing about.



## URETER CATHETERISM AS A DIAGNOSTIC AND THERAPEUTIC MEASURE.\*

BY ERNEST G. MARK, M. D., KANSAS CITY, MO.

For many years various methods for the segregation of the two urines have been suggested until at present, but two are worthy of consideration, the segregator and the ureteral catheter. From the standpoint of exact knowledge which must be the standard, the segregator is inexact for reasons which readily suggest themselves.

Given a pyuria in which kidney elements are found and in which it is desirable or imperative to determine the kidney at fault, the segregator may fail in imparting exact knowledge for several reasons, the most important of which are the following: (1) With the kidney infection there may be a cystic involvement trailing over to the opposite hemisphere which may confuse the investigator. (2) A bladder stone or new growth may prevent segregation of the ureteric areas with a consequent mixing of the two urines. (3) Trabeculation of the bladder and intravesical prostatic hypertrophy may prevent segregation.

That the segregator is easier of application than the ureteral catheter there can be no question but a lack of skill can not be urged as an excuse for an uncertain diagnosis. And, again, the knowledge obtained by segregation is extremely limited as compared with that imparted by the ureteral catheter.

The indications for and the purposes of ureter catheterism are so ably presented by Lewis<sup>†</sup> that I give them in toto. He divides them into

those for diagnosis and for treatment.

"Diagnosis:—A. To locate the origin of pus, blood, tubercular products or bacilli, the various pyogenic infections, abnormally desquamated epithelium, etc., as to whether they come from (1) the bladder, (2) the right ureter, (3) the left ureter, (4) the right kidney, (5) the left kidney, (6) the right or the left perirenal space, and communicating with the corresponding kidney or ureter.

"B. To recognize and locate obstructive conditions in the right or left ureter from (1) stricture, (2) stone, (3) adjacent tumors, (4) bend or kink in the ureter from movable or dislocated kidney, (5) valvular junction of ureter and its pelvis.

"C. To determine (1) the presence of two kidneys, (2) if only one, which is absent.

"D. To determine the number of ureters present.

"E. To determine the functional activity of each kidney separately and relatively, with respect to its excretion of urea, albumen, quantity of urine, the specific gravity, etc.

"F. To determine the size and capacity of each kidney pelvis with respect to (1) hydronephrosis, (2) pyonephrosis, (3) total obliteration of kidney secreting tissue.

"G. If there be kidney disease present, to determine (1) if only one kidney is affected or both; (2) if only one, which is the affected one; (3) if both, which is the one more affected; (4) if removal of the worse one be advisable, is the other one

\*Read before the Jackson County Medical Society, meeting of March 13, 1906.

†Ureter-Catheterism: Its purposes and Practicability. Bransford Lewis, *Annals of Surgery*, Jan., 1903.



able to carry on kidney function sufficiently? (5) if removal of one be advisable, and the other is capable of supporting life, will the operation remove the infection from the body, removing the possibility of dissemination or recontamination?

"Treatment:—A. To enlarge narrowings or stricture at (1) the ureter openings or (2) in the channel of the ureters. By facilitating drainage through the increased ureter caliber, thus obtained, to assist in the improvement of pyelitis or pyonephrosis, unilateral or bilateral.

"B. To irrigate and medicate (1) the ureters, (2) the kidney pelvis of one or both sides.

"C. To assist, by anesthetizing and enlarging the ureter opening, the passage through it of a calculus or a plug of pus, blood, etc.

"D. To use the ureter after it is catheterized, as a guide in certain abdominal and pelvic operations.

"E. By prolonged catheterization of a ureter to assist in the cure of a ureteral fistula."

The purposes of ureter catheterism, as outlined above, are so comprehensive in extent that it would consume too much time to consider each in detail. There are, however, some features in both the diagnosis and treatment that should receive fuller consideration.

The determination of the origin of a pyuria, hematuria, bacteriuria, etc., is of the utmost importance. While microscopy, catheterization of the freshly irrigated bladder and the three glass test give information of undoubted value, by means of which we may be able to state with a fair degree of certainty that the pathological focus is located in the kidneys or ureters, bladder, prostate or vesicles, the question of which kidney or ureter is affected or whether we are dealing with unilateral or bilateral disease of the up-

per urinary tract, must remain in doubt in the absence of further investigation. Observation, via the cystoscope, of the ureteral orifices and the urine as it flows therefrom, is of value but even in the hands of the trained observer is far from absolute, and in the final analysis we must turn to ureteral catheterization.

If, as a result of such investigation, a definite diagnosis of kidney disease is made and this disease is of such character as to necessitate operative interference, the question of the functional activity of the two kidneys arises as a natural sequence. The examination of the catheterized urine will reveal whether the disease is unilateral or bilateral. If unilateral, operation may be undertaken without further urinary investigation *provided* the examination of the urine drained from the opposite kidney reveals no abnormality. Should the examination of the urine from the supposedly healthy kidney show a departure from the normal in its excretory ability or in its microscopical elements, or should the disease under consideration prove to be bilateral, further investigation is imperative as an adjunct to catheterization of the ureters. By such further investigation the writer has reference to cryoscopy and the injection of methylene blue, indigo-carmin and phloridzin. After a survey of the literature relative to these procedures, the phloridzin test seems to the writer to be most depended upon and, in the few instances in which he has employed it, has proven satisfactory.

Where nephrectomy, or other surgical procedure which will directly inhibit the working power of the kidney operated upon, is contemplated, a knowledge of the functioning capacity of the opposite kidney is absolutely essential and an operation undertaken without this knowledge is criminal in the light of

the statistics relating to this branch of surgery. In De Jong's statistics of 187 nephrectomies, there occurred 81 deaths, 2 of which were due to absence of the other kidney and 9 of which were the result of disease of the opposite kidney which rendered it incapable of proper function. In this series, then, 13.5 per cent. of the deaths were due to insufficient examination, not a very flattering commentary on our boasted surgical attitude.

In kidney and ureteral stone, ureter catheterism has positive diagnostic value but, unfortunately, under certain conditions a negative finding may not be absolute. An intelligent interpretation of the urinalysis, both chemical and microscopical, of the catheterized urines will give information of value. In addition to this analysis and in conjunction with ureter catheterism, there are three procedures which are deserving of consideration. Bierhoff's test, the phonendoscope attached to a metal-cored ureteral catheter and the use of wax-tipped catheters advocated by Kelly. The latter procedure is not applicable in the male. Of the three methods, the telephonic principle has most to recommend it though none of these methods is infallible.

The employment of ureter catheterism for therapeutic purposes requires no further comment. It holds an assured position in the treatment of some forms of kidney and ureteral disease and the results from such treatment have done much to popularize this branch of urology.

As illustrative of some of these conditions, the writer begs to present the reports of a few cases. These will be divided into those in which ureter catheterism was done for diagnostic purposes and into those in which catheterization was a therapeutic measure.

Case 1:—Miss O., aged 24; referred by Dr. Johnson.

When first seen by me the patient was suffering from pollakiuria, urine occasionally blood-stained. There was some pain referred to the left renal region. Temperature about 101. After a few days preliminary treatment, cystoscopy was done. The left ureteral orifice was congested as was the mucosa in the neighborhood. Ureter catheterism obtained a purulent urine from the left kidney which, when examined microscopically, revealed tubercle bacilli. The diagnosis of left renal tuberculosis was made and nephrectomy advised.

Case 2:—Mr. K., aged 37 years, presented himself with a history of vague renal pain extending back over a period of five years. He had noticed a cloudiness in his urine which had become marked within the past year. Had been noticeably losing weight and strength for about the same length of time.

For about a month previous to his coming into my hands he had had marked renal pain on the right side; practically none on the left. Cystoscopy showed a low grade cystitis. Ureter catheterism gave badly purulent urine from both sides but more marked on the left. A later catheterization under the phloridzin test showed the painful right kidney to be the one which was carrying on the eliminative work. Right kidney: .35 per cent., left kidney: .12 per cent.

The case drifted into the hands of another surgeon who performed right nephrotomy followed immediately by nephrectomy. The patient died of uremia.

Case 3:—Mr. H.; referred by Dr. Gray.

This case was especially interesting. He had had several attacks of kidney pain extending back over a period of ten years. He had been operated on for aneurysm, for adhesions following this operation and



for floating kidney, the last operation in 1904.

At the time of my examination he had a pronounced pyuria. There was a feeling of tension in the left renal region. He was large and well nourished.

Cystoscopy revealed quite an area of congestion surrounding the left ureteral orifice but no cystitis generalis. The right ureteral orifice was free from any signs of disease.

The ureters were catheterized and the introduction of the catheter into the left pelvis was followed almost immediately by a flow of purulent urine. This flow was a steady drop, drop, drop, and there was a complete absence of the characteristic ureteral spurt.

The drainage from the right kidney was normal and while the apparently healthy right kidney discharged one and a half ounces of clear urine, the drainage from the left amounted to nearly nine ounces of very cloudy urine.

Based on this drainage, a diagnosis of left hydro-pyonephrosis was made and a temporary relief from the feeling of tension predicted. For thirty-six hours following the catheterization the patient was free from pain, when the tension recurred.

Dr. Frank Hall reported the right urine normal and that the left urine was purulent and contained tubercle bacilli.

Based on these findings, left nephrectomy was advised and performed by Dr. Gray at St. Margaret's Hospital, when a hydro-pyonephrotic kidney, containing what appeared to be a primary calculus, about the size of a filbert, was removed.

Case 4:—Mrs. H.: referred by Dr. Binnie.

This case had been operated upon about two years previously for what the patient described as an abscess of the right kidney. At the time of

my examination there was a fistula in the right loin which was discharging pus. There was pollakiuria and dysuria with a purulent urine.

Cystoscopy revealed a mass of apparently tubercular vegetations surrounding and covering the right ureteral orifice. Careful observation failed to reveal even a slight trickle of urine from this side and it was impossible to pass a catheter through these vegetations into the ureter. Catheterization of the left ureter gave a slightly blood-stained urine, the microscopical examination of which revealed nothing pathological beyond the blood.

The hematuria suggested the possibility of stone and as there had been some renal ache on that side, an x-ray photograph was taken which failed to reveal any shadow.

Operation on the right side brought to light a perinephric abscess and after this was emptied, a small fluctuating kidney was found. Incision into this and subsequent examination by Dr. Hall disclosed the fact that the entire kidney was but a mass of cheesy, tubercular material.

Some days subsequent to operation, the pain in the right kidney became very intense and Dr. Binnie performed exploratory nephrotomy. Excepting for considerable congestion, nothing pathological was found. The nephrotomy was followed by relief from pain.

Case 5:—Mrs. E., aged 35 years; seen with Dr. Pearse. There was a history of occasional hematuria of ten years duration, becoming more marked with each attack. When Dr. Pearse telephoned me she was having a profuse hematuria which had lasted for some weeks. An engagement was made for the following morning and when I reached the hospital the hematuria had ceased and the urine was macroscopically clear. Ureter catheterism was done and a double nephritis reported by the pathologist.



The apparently causeless, symptomless, profuse hematuria was almost pathognomonic of vesical tumor yet cystoscopy showed the bladder to be normal.

Case 6:—Mr. J.: referred by Dr. Ayres. In this case there was a recurrent trigonal cystitis, dating back to an old gonorrhea. The recurrence of these attacks was hard to explain and during an interval cystoscopy, I noted a slight congestion of the right ureteral orifice. Catheterization demonstrated a right pyelitis and a series of irrigations to the right pelvis was instituted, with a permanent cure as a result.

Cases 7 to 19 are of much the same character as case 6. All were pyelitis, three of which were bilateral. In this series there were nine males and four females. One of the latter cases had as an etiological factor strictures of both ureters and these strictures were dilated. The treatment, as a rule, was carried on twice weekly, never oftener, and the solutions used varied from 1-10,000 to 1-100 silver nitrate. Other silver salts were used without much apparent benefit except in one case where protargol was used throughout. The number of treatments varied from five to twenty-two and a cure was secured in all cases. At present I have one such case under treatment and the patient has received seven treatments with marked improvement.

The preceding cases seem to indicate the value of ureter catheterism from a diagnostic and therapeutic standpoint. While a refinement of diagnosis, its value is actual and not fanciful and there should be no hesitancy in urging its employment. The objections of danger of infection and traumatism which have been urged against the procedure, originate from those who have had little or no experience in the use of the ureteral catheter. Casper, Al-

barran, Kuenmell, Kolischer, Schmidt, Laudon, Ayres and Bremmerman are unanimous in the opinion that such dangers are purely imaginary.

The bugbear of the surgeon in ureter catheterism has been the reputed difficulty of its employment. As in all procedures where special instruments are required, it is necessary to become accustomed to their use, but this should be no argument against their employment.

While there are difficulties attendant upon catheterization of the ureters, these difficulties may be reduced to a minimum by the proper selection of instruments and care in the technique.

The instrument to be selected must be that best suited to the case, and in the majority of instances, the direct view instrument is in every way preferable. The reasons for such a view are admirably presented by Kolischer and Schmidt in the *Jour. A. M. A.*, June 4, 1904. The tension consequent on the lowering of the ocular end of the cystoscope is much less in the direct view instrument and the distance between the ureteral meatus and the bladder end of the catheter-tube is proportionately less. In some instances, where there is much swelling in the neighborhood of the ureteral orifices, which are, as a consequence, slightly infolded in this swelling, the different angle given to the catheter by the indirect view cystoscopes, is a decided advantage.

The personal preference of the writer is for the air-dilating cystoscope of Lewis. The absence of a lens system obviates the use of a fluid medium in the bladder with its disadvantages.

Perfect anesthesia of the posterior urethra and trigonum is essential in order to prevent the spasmodic contractions of the bladder which make accurate intravesical manipulations well-nigh impossible.

The position best suited for ureter catheterism is a modified Trendelenburg. This allows the abdominal contents to gravitate away from the bladder, lifts up the trigonal area and allows accumulating urine to flow away from the ureteral orifices.

When the cystoscope is inserted the catheters are kept sheathed until the ureteral orifices are located. When difficulty in locating the ureter openings is encountered, the inter-ureteric ligament is an excellent landmark.

Having located one ureter mouth, the corresponding catheter is inserted and pushed with a fair degree of rapidity up into the ureter as far as is desired, the distance depending upon the requirements of the case. For the definite location of ureteral obstruction due to stone, stricture, etc., or for measuring ureteral length,

the zebra catheters, graduated in centimeters, are admirable.

The catheters having been inserted, the cystoscope is withdrawn, leaving the catheters in situ to drain as long a time as is essential. While withdrawing the catheters, instillation of a 20 per cent. solution of argyrol is operative against infection.

In summarizing, it may be said that: (1) Ureter catheterism is an essential in the differential diagnosis of disease of the upper urinary tract. (2) Ureter catheterism is a *sine qua non* in the determination of the relative functioning activity of the two kidneys preliminary to renal operations. (3) In the treatment of certain pathological conditions of the kidney pelvis and ureter, ureter catheterism is invaluable. (4) In skilled hands and under proper precautions, the use of the ureteral catheter is devoid of danger to the patient.

## THE DIAGNOSIS OF CONDITIONS CALLING FOR NEPHROTOMY AND NEPHRECTOMY.\*

BY JACOB BLOCK, M. D., KANSAS CITY, MO.

Primarily the choice of these procedures depends upon accuracy of diagnosis. Modern surgery, however, in contemplating the application of the latter calls for more than this. It demands a means by which we can approximately, at least, determine the functional capacity of the organ which is to remain. Common sense suggests a reasonable knowledge of the patient, as well as his malady.

The few minutes allotted for the discussion of this division of the subject will but suffice for its most cursory review. One distinguished authority, in a most up to date contribution, devotes nearly 600 pages to a consideration of the exploration of the renal function alone. Brevity, in the face of such proximity means an insuperable task.

The most common conditions calling for nephrotomy are calculus, its simulant, hæmoturic, nephralgic, septic or uninfected retentions in hydronephrosis, of whatever origin, and occasionally pyelitis, pyelonephritis and pyonephrosis, anuria or oliguria—dependent either upon stone or acute nephritis—imperatively demands its adoption. To crown the glory of its achievements, drainage of the so-called surgical kidney or multiple abscess, by the

surgeon's knife has proved successful.

Neoplasms, tuberculosis, occasionally stone, where the kidney is reduced to a mere semblance of secretory tissue, either because of a complicating pyonephrosis or hydronephrosis, or perhaps to a residual lipomatous mass—an accompanying interstitial nephritis having determined its atrophy—pyonephrosis and hopeless renal fistulae where the etiologic factor proves irremediable, in all these nephrectomy is legitimately indicated.

As an appropriate compromise measure between these extremes of nephrotomy and nephrectomy, nephrostomy or resection are not infrequently acceptable substitutes. Without specifically reviewing the conditions calling for these intermediate procedures—but with which you are no doubt familiar—suffice it to say that a polar tuberculosis is curable by resection for the reason that corroded specimens have conclusively demonstrated an independent circulatory apparatus in this region.

Renal crises, as evidenced by an agonizing lumbo-inguino-scrotal pain, reflex vomiting with or without macroscopic urinary bleedings, are often alike common to stone, its

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simulant the so-called hemorrhagic colic, and even occasionally tuberculosis or tumor to say nothing of a reno-vesicular paroxysm due to tabes; in the latter, however, be it understood, without hemorrhage.

Much more obscure and difficult of detection are those not infrequent instances of a renal host—so modestly harboring a guest that his presence is never announced by a paroxysm—suspicion being directed to the abdominal or pelvic viscera or remote nerve tracts by the most remarkable reflex vagaries.

A simple means usually, indeed practically always, suffices to detect the cunning stowaway. The constant presence of a few erythrocytes or their shadows and especially in the evening urine, leaves little room for doubt. When paroxysms of haemorrhagic neuralgia are so frequent as to be practically continuous, this diagnostic feature fails. Such instances are rare. Ordinarily, however, microscopic blood is only visible immediately following the paroxysm. In stone it is always present. A papillary tuberculosis may also mean continuous bleeding, but there are associated phenomena differentially suggestive; nor should we ignore the value of history, physical examination, radiography, ureteral soundings, etc., but being fully aware of the limitations of the latter, the microscope is still the indispensable and indisputable means to an end.

Renal tuberculosis—primary in its relation to the uro-genital tract—has been recognized. Early detection, therefore, is not inconsequential. The disease is positively curable by

surgery. Bacilli, when the disease is limited to the kidney, are rarely present in the urine. Tuberculin reactions, culture or animal injection methods are not always available nor infallible. If the disease is situated upon a papilla, bleeding may be continuous; otherwise it is slight and infrequent; albuminuria slight and casts not common. Urinary frequency, dependent upon vesical irradiation, usually directs attention to the bladder instead of the kidney. Further along, we may detect a renal tumor which does not move with respiration. It is always fixed by perinephritic adhesions. The ureter becomes thickened, shortened and retracted and may be palpated per rectum or vagina. Cystoscopy reveals a pathognomic funnel-like retraction corresponding with the change. Vesperal temperatures, sweats, history of antecedents and a survey for the presence of strumous cicatrices or apical defects may aid in the diagnosis.

Neoplasms, benign or malignant, are not always subject to the customary restrictions of age limit, nor are they always palpable, even when advanced in point of time should their development happen to proceed towards the diaphragmatic vault. Nor are they always painful.—indeed, the reverse is usually true unless clotting causes renal colic during the bleedings. The clots when carefully studied, however, are pregnant with meaning. In the absence of cystoscopy, to exclude the bladder as a source of haemorrhage, we generally note that whether mixed intimately with the

urine, or clotted into vermicular moulds of the ureter, these haemorrhages are at first intermittent and unprovoked, the intervals of freedom from bleeding gradually becoming shorter until finally the haemorrhage may become practically continuous. Later, they not infrequently cease, owing to an occlusion of the ureter. An acute varicocele may appear. Inferentially, circulatory disturbances in the spermatic vessels are the most reasonable cause of this phenomenon. Metastases are common and should be diligently sought for. Indeed, the secondary growths are sometimes the only source of solicitude, the patient seeking counsel for the latter either ignorant of or indifferent to the primary trouble.

Haemorrhages due to vesical neoplasms, besides being detectable by cystoscopy or palpation, are distinguishable by the long interval between the first and the succeeding haemorrhage. This is a pathognomonic feature, and as in the renal form, these intervals growing shorter and shorter the bleedings finally become continuous, though they practically never cease when this occurs. Again, not infrequently the latter portion of the urinary stream is the more bloody, the bladder muscle in its contractions compressing the tumor like a sponge.

In pyelitis, pyelonephritis, non-tuberculous pyonephrosis and surgical kidney, besides the urinary, physical and microscopic findings and the customary visual, palpable and percussive physical signs, we are in possession of unmistakable etiological factors indicative of either an

ascending infectious process in continuity or by a haemic route, equally if not more serious than the former in its results.

I am quite sure none underestimates either the scope or importance of this subject. The want of time is offered as an apology, not a pretext for permitting its treatment to be thus abridged. It would exact at least an evening's study if considered seriously. The few though important data submitted will furnish an initial working basis however, which has served me faithfully in my observations of all the conditions mentioned.

Essential as is the diagnosis, it is but half the problem. When the indications point to nephrectomy as the only surgical resource, aside from the patient's general condition, that of his lungs, heart, etc., commanding the serious attention of every prudent surgeon, the paramount question is always, what of the other kidney. The spectre of an absent or incompetent organ will not down. A risk is even incurred that an unfortunate reflex may denote the healthy organ as being diseased. This is notably true in calculus anuria.

The older surgeon, obliged to content himself with a speculative solution of the problem, preciser methods being unknown or in embryo, would select the trans-peritoneal route in order to determine the presence and condition of the fellow emunctory, or fearing this then heroic measure, approach the supposedly healthy organ extra-peritoneally with a similar object in view.



Apart from the extra hazard attendant upon these preliminary procedures, then the vogue, they were generally inadequate to estimate the competency of the organ permitted to remain, even though its presence was demonstrated.

Recalling that some 600 pages have recently been devoted to the exhaustive treatment of methods calculated to measure the functional capacity of the kidneys, it goes without saying that the limited time remaining at our disposal will only permit the presentation of a nebulous synopsis about which to gather the substance either at the clinic or in your study when you have the leisure.

Basing his theories upon the discovery of the eminent French physicist, Raoult—that the freezing point of all liquids bears an exact relationship to the solids they hold in solution.—Koranyi conceived the idea that the molecular concentration of both the blood and the urine could be determined by ascertaining their respective freezing points. For the normal blood, it was found that it varied from  $-0.55$  to  $-0.57$  centigrade; for the urine from  $-0.9$  to  $-2.3$ . The more concentrated either of these fluids, the lower the freezing point and vice versa. Whenever effete material accumulates in the blood owing to deficiencies in the kidney secreting substance, its increased molecular concentration is revealed by the lowering of its freezing point and inversely by a raising of the point of congelation for the urine.

Though this is seemingly true, it soon became apparent that other

pathologic conditions might and did vitiate these deductions; notably so in the various anaemias and cardiac involvements, especially when the latter were associated with dropsies. Nevertheless Kuemmel, of Hamburg, relies almost exclusively upon cryoscopy of the blood alone to settle the question of renal sufficiency. Consulting his recent contribution to the last International Surgical Congress, I find that if the freezing point falls to  $-0.60$  he refrains from operation. Dependent upon this method in the presence of his great success in nephrectomy, he is inclined to invest cryscopy with the qualities of an oracle.

Caspar availing himself of the discovery of Von Mering that the ingestion of phloridzin,—a glucoside originally found in the root of the apple tree by Konink—provoked a glycosuria, applied this principal to elaborate a method for the estimation of the renal functional capacity. Subcutaneously injecting this substance—usually from 5 to 20 centigrams,—he found that a healthy kidney or kidneys begin to secrete sugar in about thirty minutes. He also determined the quantity of sugar eliminated and the time when this secretion ceased, including what he supposed to be normal variations. Its employment means ureteral catheterization, chemical analysis of the separated urines, etc., and above all, a collection of the separated excretions, extending over a considerable length of time. When one side failed to show sugar, or if it was relatively tardy in putting in an appearance or much diminished in quantity, that kidney was assumed



to be incompetent. Unfortunately, other observers disclosed fallacies detracting from the value of the process.

Other drugs and chemicals directly eliminated by the kidneys have been selected to perform a similar service. Thus the aniline dyes such as methylene blue, rosanilin, indigo carmine, etc., have been extensively employed. Drugs, among which notably potassium iodide and sodium salicylate have conspicuously figured, have had their advocates and partisans.

Studies with methylene blue have been very thorough and exhaustive, whether in the conjoined or separate excretions, revealing very positively among other things, that sclerosed organs eliminate poorly; whereas the contrary obtains when the epithelia are diseased. The debut of the colored urine, the duration and regularity of its excretion, the intensity of color as measured by a colorimeter have all been utilized to determine the renal functional capacity. Adverse criticism by a competent authority exposes some of its deficiencies.

To establish a uro-toxic co-efficient for settling the vexed question of renal sufficiency, animals were injected both with normal urines and those in which the excrementitious substances were diminished in consequence of disease. The greater the percentage of effete materials, the more toxic the urine. The larger the animal the greater the lethal dose. The dose for a given urine per kilo of animal, gave the desired result or toxic co-efficient. This method, though scientific, is open to

objections, not the least of which is the difficulty of its application.

Albarran expresses great confidence in the color methods, cryoscopy, etc., when applied to the separated urines, but regards them as of little moment when the information is secured from the mixed urine. In this he seems well sustained from the fact that a diseased organ may often surpass a healthy one in function owing to compensatory hypertrophy. It is found too that catheterization must extend over a considerable period of time, say two or three hours, since it appears that the variations during shorter intervals are so great that calculations based upon either urinalysis, gravity or color methods suffer too much in the aggregate to make them reliable. Per contra, Kapsammer has shown that the mere presence of the ureteral catheter provokes a polyuria. My experience in this particular, though limited, inclines me to corroborate him.

One important feature of simultaneous bilateral catheterization worthy of remark is the fact that while the healthy kidney presents considerable variation in quantity and density of secretion during short periods of observation, elimination proceeds rather more regularly and uniformly on the diseased side.

A chromocystoscopic method, rather easy of application, has met with some favor in the European clinics. An intra-muscular injection of a 4-10 per cent. suspension of indigo carmine in a normal saline solution is made. The time of its appearance in the ureteral jet, the intensity of the color of the urine as

it issues, the size of the stream, the extent and character of its projections and the duration of the color are all noted. By comparison of these items on the two sides, much valuable information is secured. Preliminary study on healthy kidneys soon qualifies the observer to make valid deductions. My own limited experience with the method inclines me to the belief that it has a promising future. It is especially attractive because of its simplicity. Indigo carmine is not eliminated in solution but in suspension, and as has been shown exclusively by the tubular epithelium below the glomeruli. This elective peculiarity is an additional recommendation and corresponds with the Haidenhain theory of urinary excretion.

We will now briefly devote a few moments to a consideration of the recognized limitations of these methods. Attempting to derive our information from the separated urines, we are sometimes estopped from the attempt by intolerant bladders and displaced ureteral orifices. Nor will anesthesia avail because of its well known inhibitory influence upon the kidney function. Where bleeding is excessive despite our irrigating cystoscopes the work is practically impossible.

Let us suppose another instance where we can resort to an exploration of the functional capacity, even with facility. Take a case of renal tuberculosis where, in consequence of the work thrown upon the opposite kidney, to provide for the necessary elimination, we find its urine loaded with albumin and diminished in gravity, and applying the color and other tests, functionally deficient. It is an organ showing a tox-albuminuria. Accepting these findings as conclusive, we naturally would refrain from surgical interference. Experience, however, shows that a removal of the affected organ will promptly result in a disappearance of the albuminuria, restoring the seemingly affected organ after it has endured the onus of eliminating the accumulated septic materials incident to tuberculosis.

Notwithstanding these limitations we must, in a spirit of progress, appeal to everything that scientifically furnishes a means to an end stopping at nothing, and even then we will find ourselves often sadly deficient, plainly showing that we require all these things and—to put it in the common, slang, Western way—"then some."

## THE TECHNIQUE OF AMPUTATION OF THE BREAST.\*

BY H. C. CROWELL, M. D., KANSAS CITY, MO.

A consideration of this subject in order to be intelligent, comprehensive, and not empirical, necessitates a contemplation first of the nature of the lesion before we can know the character or extent of the operation. While we recognize that 83 per cent of all tumors of the breast are carcinomatous and are only to be treated surgically, we have yet left 17 per cent, also surgical tumors and yet they do not demand the same radical measures which, when possible, are to be avoided, therefore, the technique of each class will depend upon the diagnosis, which, in a limited degree, must be here entertained. Given a case of tumor of the breast then, the first thing to determine is, whether it is carcinoma or a sarcoma, or some form of adenoma. If the latter, sarcoma adenoma, or adeno-fibroma, then simple excision, without entering the axilla for the removal of the lymphatic glands, suffices, bearing in mind to remove enough of the over-laying skin, especially if a sarcoma.

I believe I speak advisedly when I say that errors in diagnosis have been made by men of experience, pronouncing an adenofibroma to be a beginning carcinoma. We will not stop here to argue the case whether an adenofibroma may not become malignant but pass at once to our text, the technique to be observed in

case of doubt or uncertainty.

Having such a case, we should summon the pathologist to our side, with his freezing microtome, there to quickly determine the nature of the tumor from a section readily obtained from the growth.

If it proves to be an adenofibroma, the breast can be largely preserved and a serious operation averted and the patient left in an equally safe condition so far as after consequences are concerned.

Further than this aversion, the technique is simply that of clear surgery. Should the growth prove to be malignant all knives or instruments used should be discarded for clean ones.

The differentiation of carcinoma from sarcoma is often difficult in their inception but, in general, sarcoma occurs at an earlier age than carcinoma, is more mobile upon the chest wall, without glandular involvement or retraction of nipple, grows more rapidly, is more nodular, and frequently discharges from the nipple, in this latter particular some what, resembling Paget's disease. Paget's disease however seldom occurs in early life as does sarcoma, but between 40 and 60 years of age.

Carcinoma of the breast also occurs at a later period in life than sarcoma, usually, between 35 and 50 years of age, and universally in-

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volves the adjacent lymphatic structures especially the glands of the axilla, perceptibly or otherwise, requiring that surgical measures instituted for relief shall contemplate the most thorough ablation of all axillary glands and possibly the subclavicular often involved in these cases. While Halstead recommends thorough removal of the subclavian glands it is seldom as thoroughly done by the average surgeon as he suggests.

The mediastinal lymphatics do not admit of removal and yet may be the seat of recurrences.

Recognizing the frequent involvement of the lymphatics between the pectoralis major and minor and the retropectoral fascia, prompted Halstead to inaugurate the operation now known by his name, which is the *sine qua non* for completeness. Not only does he remove the pectoral muscles fascia and axillary glands but all fat and the fascia including the sheath of the axillary vein by the use of a very sharp knife in contra-distinction to some who advise dull dissection or no knife.

In doing this refined dissection it is desirable to avoid injury to the nerves there encountered especially the long thoracic and long subscapular. The haemostasis to be observed has in the writer's opinion been overestimated and valuable time consumed in making unnecessary ligations when the extirpation has been completed then any bleeding points should be ligated for fear of subsequent oozing or a dangerous haemorrhage. After the operation is completed a stab drain should be in-

serted in the posterior fold of the axilla.

With our present knowledge of the nature of carcinoma and its mode of invasion we are prepared to class any operation, short of complete ablation of lymphatics possible of involvement as not only unsurgical but as positively harmful, acting in no way to lessen the gravity of the malady but to hasten an already too early demise. It is hardly necessary in a paper dealing with the technique to advert to the need of determining whether any operation shall be done as we are doing and without raising that question.

The older technique and that of but a few years since, and indeed that employed by some yet, consisted in cutting freely down to the pectoral aponeurosis, dissecting the gland off from below upward, severing the mass with its blood supply last at the axilla, thus exposing a large uncovered area to be protected by artificial means from infection and cold and also constituting a bloody operation, while, by a reversion of the procedure, or Kochers method beginning in the axilla, ligating the blood supply early, a bloodless operation is secured and the breast, being allowed to remain until the axilla is completely cleaned, the otherwise exposed area is protected by a thick layer of fat not prone to cool as gauze pads must, adding to the inevitable shock. Many modifications in the construction of a flap for covering the exposed surface have been suggested, some of which seem to be eminently satisfactory for the reason that they obviate skin graft-

ing in a certain per cent of cases, covering as they do, with comparatively little tension, the denuded area. Such flaps in order to be serviceable must be free from carcinomatous involvement as in carcinoma encuiras.

Another advantage which these flap operations present, especially that devised by Dr. Jackson, is the effect of covering in, fully, the axillary space without scar tissue, which may contract and thus exercise undue pressure upon the veins with resulting edema of the arm and hand.

In order to obviate some of the ill effects obtaining after these extensive operations, such as loss of function, inability to carry the hand to the

head, or a too firm and close union effecting the circulation, Ferguson has recommended the extension of the arm by fastening it to the bedstead there to be held until healing shall have taken place, thus retaining the normal function or quite nearly so. The custom of binding the arm to the chest does not commend itself to the author whatever method of wound closure may be employed.

Recognizing the incompleteness of this paper if every little item of technique were to be noted, we feel that the brief statement here presented may serve a meeting of this character better consisting as it does largely of general practitioners.

## DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS OF APPENDICITIS.\*

BY GORDON A. BEEDLE, M. D., KANSAS CITY, MO.

By conscientious, scientific effort the isolation and elimination in abdominal diagnosis has done much to dispel the old horse-blanket diagnosis of a few years ago, namely: in inflammation of the bowels. In embracing the diagnosis of appendicitis of to-day we all familiarly recognize three essential symptoms which stand out prominently under various conditions toward aiding us in correct differential diagnosis, where such is possible without the aid of an exploratory incision. These symptoms are, pain, tenderness, and rigidity of right lower abdominal wall. The sudden onset of abdominal pain, paroxysmal in character, soon to be accompanied with desire to vomit, increased temperature and pulse, the pain gradually growing greater and at the same time more localized toward the position of the appendix; the seat of pain may vary as we know the position of the appendix varies. The tenderness-like pain gradually assuming position over the well known McBurney's point, which however may vary according to the depth or position of the lesion, sometimes only elicited by examination per vaginam or rectum; the tenderness also varies in proportion to the progress of the inflammation, increasing as the inflammation progresses and decreas-

ing when subsided, reaching its greatest degree of intensity when filled with pus. The rigidity of the abdominal rectus muscle, the third common diagnostic point, is customarily associated in location directly with the seat of pain this being, as a rule, over the lower right abdomen, embracing McBurney's point, the common location of the appendix; but if pain reflects to left side that side may alone be rigid; again both sides may be equally rigid with central pain from abscess located centrally in the pelvis. Thus in brief, reviewing the three chief essentials, pain, tenderness and muscular rigidity, accompanied with varying increase of temperature and pulse, our mind conceives a picture which increases in severity with the degree of inflammatory destruction. When the process reaches a stage of gangrene the temperature drops, pulse rate increases, pain disappears and the facial expression is that of extreme shock. When suppurative process involves appendix and adjacent tissue, a tumor which may be fluctuating in character and extremely tender on palpation, is observed at seat of appendix; muscular rigidity however often makes this tumor hard to detect and rectal examination in such cases is often of great value.

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While it is conceded thus to be able to make a clear diagnosis of the majority of our cases of appendicitis, acute or chronic, it is of vast importance that we curb ourselves from the deplorable habit of snap diagnosis. When we stop to realize that there are other organs in the abdominal and pelvic cavities that give rise, under certain pathological conditions, to so similar a classification of symptoms as to make differential diagnosis almost an impossibility, such for instance as the gastrointestinal tract, the gall bladder, the kidney, and ureter, and probably the most essential of all the organs of generation in the female pelvis, we find ourselves more cautious in the elimination of these possibilities and consequently less prone to rush into a wrong diagnosis.

Acute indigestion establishes its beginning with great similarity to appendicitis, history of indigestible food causing nausea and vomiting with temperature and pain in epigastrium, but in differentiation never reaches and becomes localized in the lower abdomen; there is an absence of tenderness and muscular rigidity; in addition the confusing symptoms are short lived especially after favorable action of a good cathartic and a few hours of dieting. In intestinal colic we have instead of tenderness on palpation, relief when pressure is made over the umbilical region and no muscular rigidity; like the gastric involvement the colic ceases when the cause is removed while appendicitis usually increases in severity.

With intestinal obstruction, attack comes on suddenly and is very severe, inability to pass gas and absolute constipation, nausea, vomiting until fecal emesis is reached. With appendicitis constipation is not always present, vomiting seldom passes the degree of completely emptying the stomach. In obstruction the temperature and pulse remain normal until advent of peritonitis. In appendicitis temperature and rapid pulse occur early; shock and collapse occur early in obstruction while usually very late in appendicitis.

In typhoid fever we have a continued general abdominal tenderness not localized, the characteristic tongue and positive Widal test, gradual onset of the typhoid temperature while, on the other hand,—localized tenderness, rigidity and paroxysmal pain.

Chief among the symptoms of gastrointestinal conditions prone to confusion with those of appendicitis are those resulting from perforating ulcers of the stomach, the duodenum and those of typhoid infection. As rule gastric and duodenal ulceration have given a preceding line of symptoms before reaching the stage of perforation, symptoms of sudden physical exertion or movement of the body followed by acute pain in epigastric with faintness and bloody vomiting although the latter may not be present, muscular rigidity chiefly over upper abdomen, temperature subnormal, rapid respiration and pulse; the size and position of perforation influencing the limitation of life. If gastric, the pain of perforation may

come on immediately after eating; if duodenal more prone to occur an hour or two later. Again, with duodenal ulcer, we find the frequent history of attacks of bloody stools and hematemesis. Carcinoma of the cæcum may in some cases and stages of growth find confusion with chronic appendicitis, while palpation reveals tumor; there is the history of slow growth, absence of inflammatory symptoms, no rigidity and slight tenderness.

The differentiation of a ruptured appendicular abscess and that of empyema of gall bladder when it has reached the stage of rupture and the contents pass down the ascending colon to the cæcum, in my mind is an impossibility without a clear cut history of previous symptoms. In the earlier stage of empyema the bladder may be palpated beneath the ribs as a palpable, rounded tumor, the area of tenderness and rigidity will remain and increase along the lower border of the liver entirely too high for the appendix although the appendix be pointing upward, jaundice may be present especially if stone or catarrhal condition exists in ducts.

Realizing that attack of pain in movable kidney is often accompanied by fever, most often found in neurasthenic adults prone to gastrointestinal disturbances, it is not surprising that the similarity under certain conditions should be misleading. If palpation by the various well known ways should fail to reveal the movable kidney, especially under anaesthesia, we have the previous history, the possible depression, reflected pain down the ureter

tenderness more general and not so severe, rigidity if present more general, but extending over the iliac fossa, chills generally an accompaniment of the fever, with frequent desire to pass urine which may contain blood.

In cases of abscess of the kidney where the pain is directed down the course of the ureter, diffused generally over the iliac fossa there is possible danger of confusion with and frequently discharged from the symptoms of a large appendicular abscess. Under such conditions we have the seat of excessive tenderness as the essential point always located over the kidney in the former, with a previous slow history of development, with probable bladder symptoms, pain and retraction of testicle. In the female we have the possibility of tubal pregnancy occurring in the outer extremity of the right tube, the time of most difficult differentiation being just prior to rupture and consequently the absence of sensitive, fluctuating tumor in cul-de-sac, which is usually found per vaginam examination after rupture. The history, however, generally reveals most of the well known symptoms of conception with the absence of the inflammatory symptoms associated with appendicitis.

In connection with extrauterine pregnancy we find various other conditions occurring in the female pelvis which at times renders differentiation wisely deferred until exploratory incision is made; chief among these are inflammatory and suppurative involvement of the right tube and ovary, the operative procedure often revealing a similar involve-

ment of both tube and appendix; still, with our chief appendicitis point in mind and the previous symptoms known, differentiation is rarely impossible. In acute inflammation of the tube for instance, there is usually the history of gonorrheal infection, seldom any rigidity of the muscles, pain tenderness less even with the maximum degree of sensitiveness directly over the tube or ovary, provided the condition has developed into an abscess of the tube

or ovary with septic fever, the tumor, palpated per vaginam, is more closely associated to the uterus than the appendicular abscess, the uterus generally held rigidly in place, the probable history of specific infection of vagina or uterus; while in appendicitis we may have the history of previous attacks, the localization of pain to the iliac fossa with extreme point of tenderness between the umbilicus and anterior crest of ilium.



## REMARKS ON HOOKWORM DISEASE (UNCINARIASIS) WITH REPORT OF A CASE.\*

BY GEORGE HOMAN, M. D., ST. LOUIS.

This affection,—which was formerly known as ankylostomiasis, has grown into pathologic prominence within the last fifteen years chiefly through investigations conducted by authority of the Federal government in the southern states of this country, and in the island of Porto Rico.

Uncinariasis, as now understood, is caused by the intestinal parasite, *uncinaria Americana*, and is defined as a specific zooparasitic disease found especially in tropical and subtropical sand areas. The mature hookworms are about half an inch long. They live in the small intestine, where they suck blood, produce minute hemorrhagees, and in all probability also produce a substance which acts as a poison. They lay eggs which cannot develop to maturity in the intestine. These ova escape with the feces and hatch in about twenty-four hours; the young worm sheds its skin twice and then is ready to infect man. Infection takes place through the mouth, either by the hands soiled with larvæ or by infected food (Stiles). Finally, the larvæ may enter the body through the skin and eventually reach the small intestine, the seat of election being the duodenum.

The symptomatology of hookworm disease is thus described:

"These worms fasten to the mu-

cosa and suck blood. They lay numerous eggs, which can be found by a microscopic examination of the stools. The number of eggs in the feces and, in a general way also, the severity of the symptoms will vary with the number of parasites present and with the duration of the infection.

The injury to the patient results from the following factors: (1) Sucking of blood by the parasites, which is a constant drain on the system; (2) loss of blood into the intestine through the minute wounds made by the parasite, a factor which also tends to deplete the system; (3) the wounds form points of attack for bacteria, hence increase the chances of bacterial infection as well as of toxic infection from partly digested and decomposed food; (4) the wall of the duodendum and jejunum becomes thickened and degenerated, and its function is thus decidedly interfered with; (5) the parasites in all probability produce a poisonous substance which acts upon the patient".

While as stated the symptoms are by no means uniform, still the most usual and obvious manifestation is anemia of different degrees with muscular weakness and emaciation—the physical inertia and mental lassitude being features that have subjected these sufferers to the half-humorous reproach of being not really ill but having the habit of chronic laziness.

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\*Read before the St. Louis Medical Society, February 3, 1906.

The extreme cases seem to occur more commonly among children and women than among adult males over 25, and are due to endemic infection totally independent of the cases that have been introduced from Europe, Asia and Northern Africa. In general, it may be said that the commonly reported cases of "pale skin," "heart disease", "diarrhoea" and "bloat", represent various stages of heavy infection with *uncinaria Americana*; and these infections are amply explained by the almost total absence of privies and closets on farms and plantations. Defecation occurs at almost any place within a radius of fifty meters from the house or hut, and as a result the premises become heavily infested with the embryos. The disease is stated to be a poor man's malady, and there is not the slightest doubt that *uncinariasis* is one of the most important and most common diseases on farms and plantations in the sandy districts of the South, and indications are not lacking that much of the trouble popularly attributed to dirt-eating and resin-chewing are in reality various manifestations of *uncinariasis* (Stiles.)

Economically, this disease is very important. It keeps children from school, decreases capacity for both physical and mental labor, and is one of the most important factors in determining the present condition of the poorer whites in the sand and pine districts of the Southern states.

The history of this parasite and its allied species as developed by helminthologists is too extensive to be entered upon now, but it may with propriety be noted here that

the distinction of having published the first report of a case in this country belongs to the late Dr. Walter L. Blickhahn of this city who died in the spring of 1895, soon after his appointment to the position of Superintendent of the City Hospital. This publication was made in the *Medical News of Philadelphia* on Dec. 9, 1895, under the title "*A Case of Ankylostomiasis*," and was accompanied by two figures in illustration.

Since that time contributions on this subject have multiplied as the disease has been better understood, the ascertained fact of the young worm being able to penetrate the unwounded human skin enroute to its duodenal destination being sensational to a degree and having an almost startling effect on scientific observers in this field. This marks the first stage of the disease, and is known as "ground itch" in Southern endemic localities.

The fact being indisputable that *uncinariasis* is spread through the feces several explanations have been advanced to account for its greater prevalence in sandy rather than clay soil regions, these being (1) that the embryos lodged in clay are not so easily disturbed and brought to the surface by the human hand or foot as when they are in sand; (2) that the retention of water by a clay formation tends to destroy the organism while the dryer condition of sandy surfaces favors their preservation; and (3) as oxygen is necessary to the development of the embryos it seems not unreasonable to assume that sand would on that account present more favorable conditions



for the growth to the encysted stage, and probably also a longer preservation of that stage (Stiles).

Report of case: E. J. A., white, male, age 39, native of Alabama, removing thence in early life to Arkansas where he has since lived with the exception of about two years in this City prior to 1894. His place of residence is a small town twenty miles distant from Little Rock, and his business is general merchandizing.

He was a man of lean figure and was first seen by me on August 25, 1904, at the Missouri Baptist Sanitarium, the immediate previous history of the case as given by his brother, who lives here, being as follows:

"My brother came to the city on a business trip and to see the Fair. He had not been in good health for several years. From a boy of 17 or 18 years he had suffered with stomach trouble. While living in this city during the two or three years prior to 1894 he was under the treatment of a physician.

Shortly after arriving in the city on this visit, as was usual with him, he called on this physician, his health being not of the best. He seemed generally weak and broken down. Two or three days after his arrival he took to bed for the most of the time, suffering from extreme headaches and some fever. The physician referred to called and treated him. He had intended staying in the city about 10 days when he came. But his condition was such that after about five days here he concluded to go home.

I occupied the same room with him and noticed he was quite delirious at night. In the morning he seemed brighter and better. One morning he told me that he would go home that night, his physician

having told him he would be well enough to leave. His train would leave about 8 p. m. I went to work, returning home about 5 p. m. with the intention of getting things in readiness for him to leave and see him safely on a sleeper. I was much surprised to be informed that my brother had left the house about 10:30 a. m. and had not returned. I did not know what to think. I felt positive that he did not take a day train because there was none; further that he would not leave without telling me good bye. And again his grips were still at the house. I waited in the hope that he might return, but at 7 o'clock concluded to make a search, fearing that something might have happened to him. Believing that on leaving the house he would go directly to the office of the doctor who had been treating him I rang up the latter's office, being informed that my brother had called there shortly before noon, got some medicine and left. The doctor was positive that when he left he was perfectly able to take care of himself. I remember asking this man if he was positive that my brother's condition was such that he was not likely to faint and fall upon the street. The answer was a positive negative.

I went directly to the Four Courts, arriving about 8 o'clock, and on using the police telephones was quickly in receipt of the information that a man. . . . had just been sent to the City Hospital via the City Dispensary. I arrived at the Hospital just as he was being taken from the examination room to a ward. . . . He remained at the Hospital that night. The following day I brought the case to your attention and that night you had him removed to the Baptist Sanitarium.

My brother was never able to remember what he did from the time he left the doctor's office. He remembered leaving after being pro-



vided with some additional medicine. He remembered that he must catch a train. He also remembered that some time during the day he went into a place and ate something. Outside of this he had no idea of where he spent the 7 hours passing from the time he left the doctor's until he went in the alley to lie down. He could not tell if he had spent all this time in walking or not, nor could he remember riding on a car during the day.

When seen by me about 10 P. M. on the date mentioned he was fairly clear in mind with some depression of temperature, and increased pulse and respiration rate. His only complaint was concerning his stomach and for the next 24 hours only butter-milk alternating with seltzer was given.

During the next few days the temperature fluctuated between 97 and 100 and in seeking a cause typhoid fever and malaria, were considered but blood tests for both proved negative having been made by Dr. Gradwohl by my request on Aug. 29 and Sept. 5. However he gradually improved, his dietary was enlarged and he quitted the hospital for his home on Sept. 6—the diagnosis not being clear by any means.

Nothing further was heard from him until in September 1905, when he wrote mentioning that he had called to see me during my absence from town and wishing advice as to his physical condition, which he described in this manner:

"I do not seem to thrive for some reason or other. . . . have frequent occurrences of heaviness, both mental and physical, and at such times find it very hard to be active and energetic. On taking some purgative I find relief for a time, but it

is only temporary. It might be described as a general disinclination to work. Suppose it is malaria, although I have not had any serious sickness since I came home from St. Louis. Another thing: I am very thin blooded and suffer (when the weather is cold or cool) with cold feet and hands and also on slight exposure to cold winds become chilled through my chest. I have tried wearing more clothing and heavier clothing but it is only a temporary relief. . . . So long as in a warm room would be all right, but on going out on the street I become chilled almost instantly. . . I need something to thicken my blood and put some flesh on my bones, but have not found anything yet which will do it."

Later he wrote: "I have felt the effects of something for 20 years and have been treated for almost everything but with no relief. I shall be very glad if I can obtain relief now, but it will always be with regret that I will think of the years past when I needed health and strength so badly and could not have it."

Consideration of the several features of the case together with the light thrown by medical literature upon the subject of hookworm disease, led to the decision to make search in that direction, and accordingly he was asked to send specimens of his stools passed according to prescribed conditions.

The microscopic work was undertaken by Dr. Gradwohl who reported finding the eggs in three specimens sent at different times but no mature worms were discovered, probably on account of distance of shipment and delay in the examination.

The treatment was thymol after three days on liquid diet, in thirty

grain doses at 8 A. M., followed by castor oil or magnesia at noon. Bland's pills were given as a tonic, this being the line of treatment suggested by Stiles, and followed with such excellent results in Porto Rico. His brother, who paid him a visit during the recent holidays, reports that he was never so well before, and he himself reports steady improvement in his condition.

Of course the finding of either the worms or the eggs is the convincing evidence in such a case and effectually clinches the diagnosis; that being determined the rest is easy.

Reverting to the condition and symptoms of this patient as observed in August, 1904, the question as to the cause of his mental confusion invites careful attention. All the ascertained facts point to the certainty that for a number of hours he wandered through the streets in a dazed mental state seeking the Union Station, and was found by the police lying unconscious at the entrance to a public alley not far from the center of the Malpais district—a remarkable fact in this connection being that he suffered no harm in person or property, a considerable sum in money and negotiable paper, gold watch, and other valuables on his person at the time being untouched.

As to the cause of his mental bewilderment and insensibility alcoholic intoxication can be absolutely excluded, and drug intoxication can be put aside with almost equal certainty. This then narrows the problem down to the question whether an overpowering dosage of toxin of duodenal origin precipitated on the

system by unascertained causes may not have been the potent factor in the case—in short that *intoxication* of hookworm causation rather than intoxication affords a rational explanation of this patient's condition.

So far as known no chemical or physiological inquiry into the nature of this toxin has been made and the suggested conclusion is therefore lame to that extent.

The fact mentioned by the patient himself that temporary relief was always obtained by recourse to purgatives is easily understood, as in the sluggish condition of the bowels usually present, the parasites accumulated in the small intestine together with the toxins present would be swept away by such an administration.

I desire to express my sense of obligation to Dr. I. H. Cadwallader, Superintendent of the Missouri Baptist Sanitarium, and to Dr. R. B. H. Gradwohl for assistance kindly afforded in getting together the facts in this case.

#### DISCUSSION.

Dr. Louis M. Warfield: I have been much interested in this case, although it is not a case that originated in Missouri. According to the history, the infection most probably occurred in Alabama, and that brings up the question, how long after the initial infection a hookworm infection can be found. In a

1. Report upon the Prevalence and Geographic Distribution of Hookworm Disease (Uncinariasis or Anchylostomiasis) in the United States—By Ch. Wardell Stiles, Ph. D., Chief of Division of Zoology.

Hygienic Laboratory—Bulletin No. 10. February, 1903.



case I saw two years ago the patient must have been infected about fifteen years previously. This affection seems to be confined to the states of the Atlantic and Gulf coast. I understand that cases of this disease are looked for here by certain men, but so far one has never been found originating in Missouri. It seems strange, since the Southern states simply teem with the infection. The connection between this affection and ground itch is interesting. In the examination two years ago of 75 boys with ground itch I found that 80 per cent, or sixty boys, had hookworm disease. When a boy gave a history of ground itch I almost invariably found the eggs in the stools. While I made the statement in my paper published in "American Medicine" that I did not believe the infection (hookworm disease) could come through the skin, still there was some marked connection between them, and I believe now, in accord with the latest researches that the ground itch is caused by the larvae. The finding of the eggs in the stool is the simplest thing in the world, for the ova are unlike anything else and when found under the microscope cannot be mistaken for ova of other intestinal parasites. The macroscopic diagnosis can sometimes be made by placing some of the infected stools on a piece of white blotting paper. After an hour there will be a brown or reddish brown, stain, due to the blood, on the blotting paper. But as far as that goes, the diagnosis is almost made on sight. After one has seen many cases one can almost pick out from a crowd of people by the typical cast

of countenance those severely affected. It is probable that the worms do not suck the blood. It is thought that they feed on the epithelium of the duodenum, this leads to a chronic inflammation of the gut and eventually to chronic dyspepsia so that those who have once been seriously infected may suffer for years from dyspepsia after worms themselves have disappeared.

Dr. G. C. Crandall: I had the opportunity of examining three different specimens of the stools. A friend of mine from Cuba sent me a number of the worms. In the stools I examined I did not find the worms but I did find the eggs very readily. They are very easily found.

Dr. Warfield: It is sometimes remarkable the number of eggs that are obtained when treating a severe infection. In one case I recall which simulated closely a case of acute nephritis, when the correct diagnosis in the back, pallor and general appearance of the patient such as to lead to a belief that it was a case of nephritis, when the correct diagnosis was made on the day following the first visit by examination of the stool, after the first treatment I counted over four hundred of the worms and then grew tired of counting. At every treatment (there were three of them) worms were found in the stools. The worms are not usually found in the fresh stools. In the fresh stools it is the eggs that are found.

Dr. Carl Fisch: Uncinariasis sometimes occurs in Missouri, too. I have reported one case where the infection occurred in a little girl living in the suburbs of St. Louis.



Formerly it was thought that the larvae were always taken up by the mouth but that theory is being abandoned since the discovery of the penetration of the larvae through the skin, finally reaching the small intestine. A very peculiar point in this connection is, that after the larvae penetrate the skin they are taken up by the circulation and carried to the heart and from the heart to the lungs. Here they are arrested in the capillaries, penetrate into the alveoli and through the bronchial tract finally get into the pharynx and mouth, when they are swallowed and carried into the intestines. As Dr. Warfield has said, the eggs are very easily seen. The larvae can be seen in the stools a few hours after defecation.

Dr. John Green, Jr: An interesting observation was made recently by Dr. Calhoun, an oculist, of Atlanta, Georgia. He encountered an unusually large number of cataracts in young persons and in seeking the cause he determined that in a majority of the cases the patients were infected with hookworm dis-

ease. He assumed that this ocular condition was brought about through the nutrition of the lens incident to the general anemia.

Dr. A. Edward Meisenbach: Regarding the blotting paper test for hookworm infection as recommended by Stiles, it is open to objection since C. F. Craig obtained a positive reaction in chronic diarrhoea, chronic dysentery as well as in chronic colitis. In addition to the experiments made to determine the mode of infection already mentioned we might add the observation of Bently who found an embryo hookworm in a vesicle in a case of ground-itch coming under his observation.

Dr. Homan, in closing: This was the first case that had come under my observation and its nature was not recognized at the time the patient was seen. His condition was so reduced and anemic when he was found by the police and taken to the city dispensary that the physicians there made a hurried diagnosis of pulmonary consumption.

## GRAFT IN MEDICINE.\*

JOHN C. MORFIT, M. D., ST. LOUIS.

It is not surprising that graft, the national and international "conventional offense," which has in the last few years manifested itself in nearly every department of social and governmental life, should be present in the ranks of our beloved profession. Its effect here, as elsewhere, is demoralizing and destructive to the highest and noblest aims. Its existence in other walks of life is ancient and the late uncovering of the practice in non-medical circles has shown its lengthy presence and emphasized its recent stupendous increase. With medicine, however, it seems to have become a matter for consideration only since specialism has become so universal. In our own city, the suits brought by certain so-called preachers against doctors and hospitals for services rendered in the line of soliciting patients, are still fresh to our memories. We are all familiar with the circulars sent out by a member of the profession, in which he covertly asked the expression of opinion from those who received the circulars, on the subject of the division of fees. This circular has been received by clear headed doctors in St. Louis, and vicinity, and for 1500 miles towards the Southwest country. Its purpose is written on its face, as clearly as if the doctor had written: "My

dear Doctor: I am a prominent surgeon. Send me your cases and I will arrange the financial part of it so that you can get the proportion you wish, out of the total collected." It was very humiliating for a St. Louisan to hear this circular read by Dr. Pigg of Indian Territory in the course of his paper recently delivered at the sixth annual convention before the Southwestern Tri-state Medical Society at Oklahoma City. But it was equally gratifying to see how accurately the aim and purpose of the circular was interpreted: and how roundly its malignance was denounced.

In connection with that article, the following appears in the November issue of the Journal of the Kansas Medical Society under the title of "Division of Fee."

"This question has not yet been thoroughly settled—or at least thoroughly enough to prevent men from writing from St. Louis and Kansas City alluring offers to the general practitioners out in Kansas and Oklahoma. At the late meeting of the Southwestern Tri-State Medical Association one of the most earnest discussions was on this subject, brought up by Dr. Pigg, because of letters from St. Louis. We gladly give the following letter space without charge and really hope that Dr. Edmondson may be benefitted by it:

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\*Read before the St. Louis Medical Society, meeting of February 17th, 1906.

Oct. 28, 1905.

Dr.

Kansas City, Kansas.

Dear Dr:—

In treating the class of cases that come within the scope of the Orthopedic Specialist and the length of time required to perfect a cure, I find it necessary that the family physician should more actively co-operate in the treatment and management of the case. The after treatment to prevent relapses is of great importance, and this duty devolves very largely on the family physician, and usually he is not paid in proportion to the service rendered. While this is true, yet my experience has taught me that most patients prefer that one fee cover all the costs in the case. In fact if they are compelled to meet further charges, the case is often neglected and a relapse follows.

I have therefore determined on the plan of co-operating with the family physician and compensating him by including in my fee sufficient to cover his services as well as my own.

I have charge of the Orthopedic work at Mercy Hospital for ruptured and crippled children, and the management authorized me to say that they have a number of free beds for those unable to pay for care and treatment, and cordially invite your support in this work. This letter is prompted by a spirit of fairness and justice, and for the best interests of this much-neglected class of work.

Yours fraternally,

M. M. EDMONDSON.

The publication of such circulars does injury and injustice to the organized profession but as long as they supinely submit to the odium thus cast upon them, they deserve the injustice that is brought about. It is our duty to let the profession

know that such matter does not represent the sentiment of the organized and ethical profession in any community.

Now we all know that in our own community of St. Louis this practice exists, and whether we admit it or not; whether we prefer to disclose it or not, the evil is with us. I am not unmindful at this moment of being asked over the phone within the past few months, by a doctor of this city, to operate on a case of malignant tumor of the maxilla. After explaining the case to me and finding out the amount of my fee, he said he would arrange for operation, and would be glad to turn it in the hands of one of his friends who would divide the fee with him. He expressed surprise that the case was refused on these conditions and, as an excuse, asserted it was common practice among the largest proportion of the profession, here and elsewhere. This I believe to be untrue. There are some men undoubtedly, who are addicted to this practice, but I believe they are in the very small minority. However, such experiences as each one of us is familiar with leave little doubt that the practice is too prevalent and that the fair name of our profession is tremendously injured.

Who earns a fee? This is not a hard question to answer. The man that makes the diagnosis; the man that calls in necessary aid; the man that directs his patient into proper channels undoubtedly earns a fee, and the best that he can get. His patient is under obligations to him, and to him alone, for the services he has received at the hands of his



medical adviser. The patient is equally responsible to any other medical man who renders him a service. The medical adviser, the family physician, the internist, or whatever else we may designate him, is not in the least responsible for the payment of the consultant's fee, be he oculist, aurist, gynecologist, surgeon, or what not.

Also the patient himself, and he alone, or his legal representative, is responsible to the consultant. In this question, which has been before us in various aspects for some years, there is a harping on the largeness of the surgeon's fee, and the smallness of the family physician's fee. The whole question seems to center around the surgeon and the general practitioner, rather than the general practitioner and specialists other than surgeons. For a matter of consideration, it is convenient to take the surgeon as a type, rather than as the exclusive offender. For no doubt, graft is equally prevalent in all lines. I have myself been sounded by non-surgical specialists. The disparity between the surgical operative fee and the family physician's fee is not due to the fact that the surgeon's fee is excessive, nor in any way out of proportion with the service rendered. The \$500.00 fee is exceptional; the \$1000.00 fee is rare. But in very few instances is an exorbitant fee charged and less frequently is it obtained. So rarely, in fact, that we might leave it out of discussion. Both the specialist and the general practitioner are underpaid ninety times out of a hundred, and this is because of financial inability on the patient's part more

than any other cause.

The seeming disparity in the amount of their bills is due more to the fact that general practitioners and family physicians undervalue their services rather than that the specialist overvalues his. Until the internist or family physician learns to put a higher value on his diagnostic ability than the \$2.00, \$3.00 or \$5.00 per visit for the one, two or three visits necessary for him to make an important diagnosis, he has no one but himself to blame, and he ought not to murmur that the specialist obtains more nearly his just deserts; but rather ought he to chide himself for being like the man who carried his friend to the gates of heaven only to find that riders but not beasts of burden were admitted. Until each doctor learns to stand on his own feet and educate his patients to a knowledge of the fact that an intelligent opinion and well worked out diagnosis is of more real value many times than the procedures undertaken for the immediate cure of the trouble, he has no right to complain of his financial returns, and to ascribe his lack of remuneration to a disparity in fees, for which he himself is responsible. A man does not deserve greater remuneration than the estimate he makes of the value of his own services.

Why should dear old family Dr. A. expect a specialist, Dr. B., to part with any portion of his fee? Is A.'s lack of moral courage and business sagacity to be compensated for out of the specialist's pocket? Has specialist B. so little confidence in the value of his own results and in his conscientious endeavor to do the

right thing towards his patients that he cannot depend on his professional skill and reputation alone to increase his business, that he must needs feel called upon to pay his general practitioner friend any portion whatsoever of the remuneration due him and him alone? Carry the case a little further: If specialist B. does pay Dr. A. a percentage of the fee, why should specialist B. lose that? Why should he not look around and endeavor to reimburse himself for the expense he has been put to, to get his patient? Why should he not make arrangements with the model hospital to get a proportion of the income said hospital obtains from the patient he sends there? That would help out considerably, and the longer he kept the patient there, the more it would help out.

Or suppose this patient, a stranger from the country, should remain in the hospital long enough to prove a dead failure to the specialist, why should not specialist B. recommend to friends of the deceased an undertaker whose good services he would be willing to guarantee? And why should not this undertaker pay specialist B. a good round percentage of his total, since specialist B. was kind enough to recommend the undertaker as a man who could do for his erstwhile patient what he had neither the training nor the inclination to do?

Another source of income might also be invoked: Why should not specialist B. have a remunerative understanding with his druggist? I do not mean to imply that the physician has nothing to do with the

specialist's charges. The specialist, as a rule, knows nothing about the ability to pay of the patients referred to him. It is right and proper that he should be guided in his fees by the information furnished him by the family physician, provided he be a man of integrity. But neither the specialist nor the physician should suggest or assume either directly or indirectly, the one to the other, the financial responsibility which naturally and rightly belongs to the patient.

We will admit that an unjust disparity in fees exists, but we cannot admit that one wrong must be offset by another. The increased cost of doing business and the increased cost of living with a coincident increase of the average man's means in the last few decades makes it incumbent on the profession to increase its charges for services rendered. It is also our duty to ourselves individually and collectively to modestly educate the public into a proper estimate of the value of the services we give them and when they know the value they will attempt to meet the demands of justice.

The value of human life cannot be gauged in dollars and cents. The man who literally saves a life by stopping a hemorrhage, is not fully paid by the patient's check, no matter what the size. The patient who receives the benefit of a skillful diagnosis should not estimate its value by the cost of a visit and a prescription for calomel and salts. It is not what is done that we are paid for, but it should be what we know how to do and what not to do that should influence the fee.

There is no rule in our community which governs this question, but if the action is wrong, there should be a penalty imposed by the organized profession for the breach of professional ethics. "In the principle of medical ethics, Section 4, Article 6, is found the only reference to this matter. Let me quote: "It is derogatory to professional character for physicians to pay or offer to pay commission to any persons whatsoever, who may recommend to them patients requiring general or special treatment, or surgical operation. It is equally derogatory to professional character to solicit or receive such commissions." In Section 1 we find the clause. "To every one on entering the profession and therefore entitled to full professional fellowship rises an obligation to uphold its dignity and honor, to exalt its standing and to extend the bounds of its usefulness."

The St. Louis Medical Society of Missouri has the right, and I believe it is its duty, to take some definite action in this matter. There is nothing in our by-laws or rules which prevents graft in medicine. There is no official action which has been taken since our affiliation with the American Medical Association which defines our position in this matter nor which provides a penalty for the offense.

At this time, when there is a general revolt against dishonesty and questionable practices in all departments of modern life, both social and political, the medical profession should step in line and demand an open, frank and honorable method of practice from its members. Prac-

tices such as I have outlined should be stifled in their incipiency. When we accomplish this we will have more respect for ourselves and inspire more respect from the public.

I realize fully that I have touched here on only one phase of graft in medicine. I have done this because I believe this is the more serious phase, and one which, in St. Louis at least, results in the greatest injury to the profession as a whole. It is a matter that might have been referred to the Committee on Ethics but I believe it is a question which is large enough to be discussed by the whole society and later epitomized into some effective action by the proper committee.

#### DISCUSSION.

Dr. G. M. Tuttle: I think Dr. Green and Dr. Dorsett have hit the mark. The patient must be taken into consideration as well as the family physician and surgeon. Let the specialist promise to divide any fee with the medical man but let it be stated in the bill that this \$25 or \$50 of the fee is for the services of Dr. A. who is the family physician.

Dr. Morfit, in closing: No man has more respect for the medical man than I, nobody wants his counsel more than I do, nobody wants to see him get his just due more than I do, but I do not feel that the specialist who gets a just fee, actually or comparatively large, should give a part of his fee to the family physician, whose fee is comparatively small due to his own under-estimation of his services. I have learned to-night through the words of a



prominent medical man who discussed this question that there is a coarse graft and refined graft. If I say to Dr. Jones, "Send me your liver abscess and I will charge \$500 and give you half," that is *coarse* graft. But if he send me the case and I operate and voluntarily send him \$25 that is *refined* graft, but it is *graft*. The family physician and the consultant are deserving of just compensation, but neither one at the expense of the other. Each earns his fee and each ought to get it, but what I object to is the offering, giving or accepting of commissions.

Fees of specialists are regarded by certain medical men as unjust in

comparison with their own which they pretend to regard as a standard of honesty and fair dealing. The specialist is regarded as a grasping, cold-blooded financier by too many of his fellow practitioners and they attempt to treat him as our grafting police officers treats his foot pad pal. They advocate preventing what they are pleased to regard as "robbery" by dividing the spoils. They rob the robber to protect their patient and they do it in so modest a manner that the patient never knows of the benefaction and the noble deed passes into oblivion all unsung.

## A CASE OF SUBHYALOID HEMORRHAGE.

With Remarks on the Source and Anatomic Situation of this Variety of Intraocular Hemorrhage.\*

BY JAMES MOORES BALL, M. D., ST. LOUIS.

J. W. M., male, aged 40 years, was referred to me by Dr. J. W. Hamilton, of Mt. Vernon, Ill., on January 20, 1906.

Patient states that his right eye has always been defective. He has never been able to read with it. He

his eyes gave him no discomfort; he had no blurring of vision and no headache. In his 17th year he became a bill clerk in a grain elevator, which position he held for one year. He then followed blacksmithing for six years. For two



Subhyaloid Retinal Hemorrhage. (Ball).

could see large objects but has no definite recollection as to the amount of vision with this eye. When 13 years old he had an attack of conjunctivitis. During his school life

years of this period he was engaged in "flue-welding," which was very trying on his eyes, because of the close attention required in observing white-hot metal at close range (about

\*Read before the St. Louis Medical Society, meeting of January 27th, 1906.

four feet). This exposure caused no pain but produced failure of vision, reading becoming impossible without the aid of glasses. Sixteen years ago the patient abandoned blacksmithing and engaged in the laundry business.

The present trouble began three weeks ago with blurring of near vision. His glasses were changed by an optican to  $+1.50$  for each eye. On January 9, 1906, during a "coughing spell," occurring in the morning, the patient's right eye became suddenly and completely blind in the direct line of vision, although at the inner and outer sides he had perception of light. For about two hours the color of the obstruction was totally black; then, when looking at a gas jet, it appeared to be blood-red; at the present time objects look foggy. Vision gradually improved reaching: V. R. E. = fingers at 4 feet.

Patient has had one mild attack of rheumatism about 20 years ago. He has never had syphilis. His father was killed by an accident. His mother died at the age of 53 "from dropsy and an ovarian tumor."

When the patient visited me (January 20, 1906), V. R. E. = fingers at 4 feet; V. L. E. =  $\frac{20}{16}$ . Under a mydriatic (atropin) V. R. E. = fingers at 2 feet; V. L. E. =  $\frac{20}{50}$ . With glasses: V. R. E. with  $+8.00$  D. =  $\frac{50}{7}$  V. L. E. with  $+2.50$  D. =  $\frac{20}{6}$ .

Ophthalmoscopic examination shows the left eye to be normal. The right eye presents, in the lower temporal quadrant of the fundus, a large hemorrhage which evidently is undergoing resorption. This blood area

is shaped much like the letter D turned  $15^\circ$  to the right. Its upper internal extremity is separated from the optic nerve-head by a space of 1 papilla diameter. It is bounded below by a red crescent which is separated from the main body of the clot by a grayish white line. In this respect the case I report is different from any one described in the literature. The body of the hemorrhage does not now involve the macula, although it probably covered the macula originally, as is evidenced by the presence of a grayish white area situated above. Scattered alongside the vessels above the clot are a number of small white round areas of retinal degeneration. Throughout the area of the hemorrhagic plaque the retinal vessels are invisible. The general color of the clot is a dark brick-red. In places it approaches a lighter color, notably above where absorption seems to be progressing rapidly. By direct ophthalmoscopy I found the central area of the hemorrhage to be hypermetropic 4 D. The urine was examined with negative result.

Patient returned February 3, 1906. V. R. E. with  $+8.00$  D. =  $\frac{12}{50}$ . The hemorrhage had diminished about 25 per cent. in area.

#### SOURCE AND ANATOMIC SITUATION.

The exact source of this variety of intraocular hemorrhage and its anatomic situation are important points, on which, however, no general consensus of opinion exists at the present time.

Nettleship<sup>1</sup> speaks of the condition as "a single very large extravasation (which) occurs on the surface of the



retina beneath the internal limiting membrane from rupture of a large retinal vessel, probably a vein." In another place, while apparently referring to these cases, he states that: "Very large hemorrhages, many times as large as the disk, sometimes occur near the yellow spot, and probably all the layers then become infiltrated, while sometimes the blood ruptures the anterior limiting membrane of the retina and passes into the vitreous."<sup>2</sup> Commenting on Morton's<sup>3</sup> case, Nettleship gives his opinion that the arrangement of the essential structures in the region of the macula accounts for hemorrhages of this character affecting that situation in preference to any other.

Berry<sup>4</sup> describes subhyaloid hemorrhage as an effusion of blood from the retina, spreading out "in a thin layer between the retina and the vitreous without passing into the latter." He calls attention to the "dense central scotomâ which passes off, entirely or nearly so, after the lapse of several months." He states that the pathology of the affection is not clear.

On the other hand Hotz<sup>5</sup> argues strongly that the perfect restoration of vision in these cases is a sufficient proof that the blood is situated in front of, and not in or behind the retinal layers.

In a paper which is notably clear in its descriptions, and explicit in its remarks, Hotz describes and discusses three cases which had occurred in 20 years' practice. His opening sentence is so appropriate that I will quote it:

"Of all the hemorrhages occurring in the interior of the eye the ef-

fusion of blood between the retina and vitreous is the most interesting kind and deserves our special attention; for as this effusion usually spreads over the region of the macula it causes a sudden and complete loss of vision, which naturally frightens the patient in no small degree."

Frost<sup>6</sup> describes the condition as an extravasation beneath the hyaloid membrane. He argues for the situation between the retina and hyaloid membrane on clinically and ophthalmoscopically observed facts. He states that it has been suggested that these hemorrhages are chorioidal and not subhyaloid. "The evidence, however, in favor of their being subhyaloid is very strong," as follows:

1. The sharpness of outline of these hemorrhages is not consistent with extravasation into a tissue like the chorioid; furthermore the patients complain of seeing objects as through a red veil, which leads one to believe that the blood must be anterior to the layer of rods and cones.

2. The color of the extravasated blood being nearly that of the vessels, it is not easy to determine the relation of the latter to the hemorrhage. He then cites Morton's<sup>7</sup> case in which the area of extravasation became white after several months and was then distinctly seen lying in front of the retinal vessels.

3. Frost endeavors to controvert Silcock's<sup>8</sup> view that in his case, where the straight edge of the hemorrhage was directed obliquely downwards, the blood was in the chorioid, by saying that the shape and outline of the extravasation are against its being contained in the interstices of

such a tissue as that of which the chorioid consists.

Lang<sup>9</sup> argues for the subhyaloid position on account of the complete obscuration of the retinal vessels at the edge of the extravasation: the red blurring of objects as seen by the patients, and the common existence of a scotoma. He quotes de Wecker as authority for stating that a hemorrhage of the chorioid will cause no such scotoma. As to the central situation he accepts Gunn's explanation of a potential cavity in the macular region, owing to the more feeble attachment of the hyaloid membrane to the retina here.

Haab<sup>10</sup> speaks of these cases as hemorrhages between the retina and the vitreous body, and refers to Leber<sup>11</sup> who took a similar view. Haab relates six cases, all from a clinical point of view.

Fuchs<sup>12</sup> in the second American edition of his text-book, describes these hemorrhages as preretinal and the text is unchanged in the ninth German edition.<sup>13</sup>

Fick<sup>14</sup> does not mention subhyaloid hemorrhage. Norris and Oliver<sup>15</sup> say that, "In some rare cases large hemorrhages, after escaping from the fibre-layer, find their way between the retina and the hyaloid, and spread out as a concave sheet over the face of the retina. Such hemorrhages, even when they invade the macular region, may be entirely absorbed without any impairment of vision."

Gibbons<sup>16</sup> in speaking of retinal hemorrhages says: "When they occur at the macula they produce an irregularly oval blotch with its long axis vertical. If the hemorrhage is

large and of a drop-like form it is as a rule situated between the internal limiting membrane of the retina and the hyaloid membrane of the vitreous."

Holmes Spicer,<sup>17</sup> in an early communication, mentions the difference of opinion as to the seat of the lesion. He considers these hemorrhages to be venous in origin on account of their spontaneous arrest and the turgidity of the veins. He regards the extravasations as too large to be capillary. Recently in a syndicate book,<sup>18</sup> to which he contributed the chapter on diseases of the optic nerve and retina, Spicer states that the hemorrhage is on the retina beneath the hyaloid membrane. He mentions Fisher's observations, of which I will speak presently, and adheres to the view that the blood comes from a vein.

A recent work on the eye by Hantsell and Sweet<sup>19</sup> does not mention subhyaloid hemorrhages.

As far as I am aware, in only one instance has a histological examination been made of an eye with subhyaloid hemorrhage. This was in the celebrated case of Mr. J. Herbert Fisher,<sup>20</sup> of London. His investigations indicate that in his case the blood escaped from a minute vessel, and detached the internal limiting membrane from the retinal layers spread in the space thus formed.

Fisher's patient was a woman, 60 years of age, whose vision failed suddenly when she was at laundry work. She had severe exopistaxis, March 13 and 14 (1895), requiring admission into St. Thomas' Hospital. Her father died of tuberculosis and her mother passed away in

a "fit." It is unnecessary to give all of the history. Suffice it to say that April 30, 1895, she was admitted to Lawford's eye clinic. Vision = hand movements, but cannot count fingers. Ophthalmoscopic examination showed a large subhyaloid hemorrhage. Its upper border, on a level with the optic disc, was sharply defined and gray; its lower border was less regular and had a fringed appearance. The retinal vessels over the affected area were completely obscured. Below the main patch and in connection with the inferior macular vein, was another patch of extravasated blood, less sharply defined and much smaller than the central one. Otherwise the fundus was normal.

L. E. with + 5.00 D. gave V =

$\frac{6}{9}$

On May 14 V. R. E. = fingers at 2 feet.

On May 28 V. R. E. = fingers at 3 feet.

She had several uterine hemorrhages between these dates.

She died May 31. Temperature just before death, 106.4°.

The autopsy showed cerebral hemorrhage. The left lateral, third and fourth ventricles contained blood-stained fluid. Left motor tract in hemisphere was infiltrated with blood. The microscopic examination of the affected eye showed the following changes:

A double membrane was seen running over the surface of the blood. The membrane nearest the blood showed nucleated cells in connection with it, while the other membrane was structureless. The first was evidently the internal limiting mem-

brane of the retina and the second was the hyaloid membrane of the vitreous. The two membranes ran practically parallel with a minute interval between them, and both were on the surface of the extravasated blood. At one place a small number of blood corpuscles was seen between the two membranes, which at this spot were dissociated; here the blood had apparently broken through the internal limiting membrane of the retina but had been checked in its passage toward the vitreous by the hyaloid membrane. At the end of the section furthest from the optic nerve the blood had burst through both membranes, and had spread itself out for some distance as a thin layer on the surface of the hyaloid membrane. The retinal layers were not infiltrated. The section gave no clue as to which of the retinal vessels was the source of the hemorrhage.

Fisher concludes that subhyaloid hemorrhage should be classed under the head of retinal hemorrhage.

Blood is apparently poured out from a retinal vessel, does not involve the retinal layers, but detaches the internal limiting membrane from their surface and accumulates in the space so formed. It may break through not only the internal limiting membrane but also the hyaloid membrane and thus pass into the vitreous humor. Though the specimen proves nothing in this direction, it seems probable that to tear off the internal limiting membrane from the retina would require blood and moderate pressure from a minute artery.

Fisher holds that blood from a



vein would be insufficient to cause this separation. He believes that the possibility of estimating the surface of the hemorrhage to be hypermetropic seems doubtful.

Parsons,<sup>21</sup> whose recent book on the pathology of the eye is a standard authority, has this to say in speaking of retinal hemorrhages: "The larger hemorrhages, may be limited by the hyaloid membrane, as in the typical subhyaloid hemorrhage, or they may burst through into the vitreous, tearing up and destroying the retina, and forcing the vitreous and lens forward, thus causing a secondary glaucoma."

#### ETIOLOGY.

Subhyaloid hemorrhage is a rare disease. Hotz<sup>22</sup> met with three cases in 20 years' practice. "The case which forms the text for this paper is the first one I have recognized.

Eales<sup>23</sup> has recorded four cases. He considers the disease more common in males, attributing the comparative immunity of females to the relief afforded by menstruation. His views are not in harmony with those of other observers.

Spencer Watson<sup>24</sup> relates a case of subhyaloid hemorrhage in a woman at the climacteric. Hotz's<sup>25</sup> first case occurred in a woman 42 years of age, who, while menstruating, stood with bare feet in very cold water. The menses ceased and two days later, while working over embroidery, she became dizzy and soon was blind in the left eye. Five weeks later vision was normal.

In this connection A. Hill Griffith's<sup>26</sup> experience is worthy of record. In an experience comprising

6500 cases seen in private, and a large but unstated number in clinical practice, he found 14 examples of subhyaloid hemorrhage. Ten cases occurred in females and 4 in males. In this period the total number of cases of retinal hemorrhage was 83, classified as follows:

41 cases of retinal hemorrhage;

20 cases of hemorrhagic retinitis;

14 cases of subhyaloid hemorrhage;

8 cases of vitreous hemorrhage.

Thus it is seen that 16 per cent. of cases of retinal hemorrhage observed by Griffith were of the subhyaloid variety. This is certainly an unusual experience.

Doyle's<sup>27</sup> case occurred in a man, Lang's<sup>28</sup> in a boy, and Mellinger's<sup>29</sup> in a man. Of Hotz's<sup>30</sup> three cases, two occurred in women. Thomas's<sup>31</sup> patient was a young woman with delayed menstruation.

Obermeier's<sup>32</sup> case is unique. His patient received a fall upon the back of the head, followed by subhyaloid hemorrhages in both eyes. The effusions were large and reduced vision to 3-50 and 1-60 respectively. Nine months later the blood had been absorbed and vision was normal.

Ziegner<sup>33</sup> reports a case of idiopathic hemorrhage between the retina and vitreous humor in a 52-year old man. The clot was completely absorbed in 3 months, following the repeated subconjunctival injection of physiologic salt solution.

#### PROGNOSIS.

Of all the varieties of retinal hemorrhage the subhyaloid is the one

which gives the most favorable prognosis, both as regards the restoration of vision and the life of the patient.

In conclusion, the writer wishes to thank Dr. W. E. Fischer, of St. Louis, for making a sketch of this fundus, and Dr. Mortimer Frank, of Chicago, for looking up references in the Newberry library.

#### DISCUSSION.

Dr. John Green Jr.:—I have never seen a case of subhyaloid hemorrhage, my experience not being so extensive as that of some of the other gentlemen. In the literature of the past year I found one report of rapid resorption of hemorrhage into the vitreous following the *sub-conjunctival* injection of dionin. Possibly a similar procedure might be useful in a case of subhyaloid hemorrhage.

Dr. Barek:—I do not believe these cases are so rare. I have seen a number of them. They differ from the other forms of retinal hemorrhages in that there is but one hemorrhage, while in the other forms there are as a rule several. The condition is so typical, that the diagnosis cannot be mistaken; the sharp boundary, the central location and the sinking down of the blood later on are characteristic. The reason why we find this single hemorrhage in this region only is because of the distribution of the arteries. We find there only terminal arteries without collateral circulation; therefore rupture takes place in them easier than in others; it is just so in the brain.

- <sup>1</sup>Nettleship: Diseases of the Eye, Philadelphia, 1900, p. 246.
- <sup>2</sup>Ibid., p. 235.
- <sup>3</sup>Morton: Trans. Oph. Soc. of United Kingdom, Vol. IV.
- <sup>4</sup>Berry: Diseases of the Eye, Philadelphia, 1889, p. 269.
- <sup>5</sup>Hotz: Annals of Oph. and Otology, Vol. II, No. 1. (Jan., 1893).
- <sup>6</sup>Frost: The Fundus Oculi, Edinburgh & London, 1896, p. 169.
- <sup>7</sup>Morton: Transactions Oph. Soc. of U. K., Vol. IX, p. 145.
- <sup>8</sup>Silcock: Transactions Oph. Soc. of U. K., Vol. VII, p. 176.
- <sup>9</sup>Lang: Transactions Oph. Soc. of U. K., Vol. VIII, p. 155.
- <sup>10</sup>Haab: Beiträge zur Augenh., Heft v. 1892.
- <sup>11</sup>Leber: Graefe-Saemisch Handb., Band v. 553.
- <sup>12</sup>Fuchs: Text-book of Ophthalmology, New York, 1899, 6. 443.
- <sup>13</sup>Fuchs: Lehrbuch der Augenheilkunde, Leipzig und Wein, 1903, s. 518.
- <sup>14</sup>Fick: Diseases of the Eye and Ophthalmoscopy, Philad., 1896.
- <sup>15</sup>Norris & Oliver: A Text-Book of Ophthalmology, Philadelphia, 1893, p. 448.
- <sup>16</sup>Gibbons: The Eye, New York, 1905, Vol. II, p. 443.
- <sup>17</sup>Spicer: Royal London Oph. Hosp., Reports, Vol. XIII.
- <sup>18</sup>Posey & Wright: Diseases of the Eye, Nose, Throat and Ear, Philadelphia, 1903, p. 430.
- <sup>19</sup>Hansell & Sweet: Text-Book of Diseases of the Eye, Philadelphia, 1903.
- <sup>20</sup>Fisher: Ophthalmic Hospital Reports, Vol. XIV, p. 291.
- <sup>21</sup>Parsons: The Pathology of the Eye, Vol. II. (Histology, Part II), p. 571, N. Y., 1905.
- <sup>22</sup>Hotz: Annals of Ophthalmology & Otology, 1893, p. 6.
- <sup>23</sup>Eales: Birmingham Medical Review, July, 1880, p. 262.
- <sup>24</sup>Watson: Transactions Oph. Soc. of U. K., Vol. I, p. 41.
- <sup>25</sup>Hotz: Annals of Oph. & Otol., Vol. II, 1893, p. 6.
- <sup>26</sup>Griffith: Lancet, August 6, 1904.
- <sup>27</sup>Doyle: Trans. Oph. Soc. of U. K., Vol. VIII.
- <sup>28</sup>Lang: Ibid.
- <sup>29</sup>Mellinger: Zeh. Klin. Monatsb., Vol. XXIV, p. 404.
- <sup>30</sup>Hotz: Annals of Oph. & Otol., 1893, p. 6.
- <sup>31</sup>Thomas: Ophthalmoscope, July, 1905.
- <sup>32</sup>Obermeier: Klinische Monatsb. für Augen., March, 1901.
- <sup>33</sup>Ziegner: Berliner Klinische Wochenschrift, April 1, 1901.

## ADDRESS OF THE PRESIDENT OF THE SOUTHEAST MISSOURI MEDICAL SOCIETY.\*

BY T. W. COTTON, M. D., VAN BUREN, MO.

I must confess that I am so deeply impressed with the great honor laid at my door by this association and at the same time so deeply sensible of my unfitness to properly perform the duties of the position, that I should on this occasion remain silent, had not custom otherwise decreed. The spirit of progress is everywhere apparent; the new is supplanting the old on every side; the machinery of ten years ago, then quite satisfactory, must soon be sold as old iron to make room for something more efficient. There are those still living who have had the pleasure of observing the transition from the stage coach, the horse car, the cable car, then the commodious electric car and speedy automobile. These are only specimens of the progress of the age that is showering its blessings in great profusion on all trades, crafts and professions.

The spirit of enterprise is no longer confined to the shores of the western world, but the nations of the eastern hemisphere have been aroused from centuries of lethargy and are borrowing ideas from the more up-to-date and modern.

A striking illustration is noted in the Russo-Japanese war, in which that little nation of Asia, with only forty-six millions of people, but with the latest improved equip-

ment and modern methods, defeated the largest empire in Europe; an empire that has shed little lustre to the benefit of the world's enlightenment since the days of Frederick the Great.

The battle of Mukden perhaps exceeding in magnitude and gravity either Sebastopol or Austerlitz was a splendid victory for the "Sunrise" nation, which proclaimed through its emperor a few years ago, that "Knowledge shall be sought for throughout the whole world." That the medical and surgical features were also proficient is attested by the fact that after the battle of Liao Yang there were in the hospitals fifty-three thousand sick and wounded at one time, which after many days showed a mortality list of only three hundred and sixty-five. Again the tender care accorded their wounded prisoners, (the wife of the commander in chief on the field entering personally into the Red Cross work) excites the admiration of the whole world. But the greatest victory in the annals of history, one by the side of which all the brilliant achievements on the field of battle in the past, will pale into comparative insignificance is yet in the future, but bidding fair to consummation at the present time, is the In-

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\*Read at the Annual Meeting, Farmington, October, 1905.



ternational Peace Conference that is to settle all disputes and differences between nations and countries without bloodshed or loss of human life. "Never before have there been so many marked improvements looking toward permanent peace and the complete abolition of war, as in the last five years. Even during the last few months an unprecedented number of treaties of arbitration and friendly settlement of difficulties have been made between nations. In one instance where a boundary line has been the cause of a dispute of long standing and most irritating character, adjustment has been amicably made, and the new treaty line is guarded, not by a series of fortresses, but by a statue of Christ—the Prince of Peace—as a perpetual memorial of friendship now established between the two countries." The precept "to love thy neighbor as thyself" seems to be getting something of recognition among nations as it should have among individuals. As the wheels of progress roll along, the horror of war increases the conviction that war is unnecessary, and Tennyson's vision of the furling of the battle flags of the world will become a reality. A revision of the existing laws and customs of nations will follow, and there will result a "better, nobler, manhood, a sweeter, purer womanhood than any of which the poets have sung or dreamed."

In this evolution the American Republic holding aloft the beacon light of liberty to all the world, ever ready to pour oil on the troubled waters and conciliate peace and friendship between those who are otherwise disposed with an active chief executive must be the princi-

pal actor in this drama of nations.

Our own state of Missouri, among the most brilliant in the galaxy of states, geographically bearing the same relation to the other states that the hub does to the rest of the wheel, with the largest permanent school fund of any state in the Union, one-third of the state's revenue being set aside for educational purposes, is a source of pleasure and pride to her population of more than three millions of prosperous, progressive and patriotic souls.

That the attention of the world is attracted by our nation, is proven by the fact that, notwithstanding our rigid immigration laws, there have landed on our shores from all quarters of the earth in the last twelve months, ending June the 30th, a million immigrants, or about one-eightieth of our population.

Emerson says "Our whole national history appears like a last effort of Divine Providence in behalf of the human race, and that America is but another name for opportunity."

While science, art and invention have progressed by leaps and bounds, in this country the name of which is a synonym for opportunity, let us look at what is doing in the medical sphere, which is one of the three "liberal" professions; ministry, medicine and law, having long ago acquired the term liberal, because of their pursuits, preventing and curing sin, preventing and curing disease and preventing and curing legal wrong, and because the sons of religion, medicine and law have in all ages been permitted to follow their vocations as free men, "subject to no bond, with hands unfettered and tongues untied."

Some one has defined this trio in a little different manner as follows: "The ministry disposes in a satisfactory manner of a man's mind, medicine, summarily of his body and law most effectually of his estate." The profession that deals with man's body is the one that is of most concern to us at this time. The one which Mr. Gladstone distinguished as "the coming profession," that calling of which Matthew Arnold in his visit to this country said, "that he was impressed by the fact that it seemed to him the members of the medical profession surpassed those of divinity and law by their intelligence and power."

If these things be true, it is simply because the great advances made in medical science of late years have opened up new and splendid opportunities, which invite us to make ourselves equal to them. This can not be done by political organization or social influence, but must be done by industrious application and study.

The list of the "healers of men" is a long one, reaching back in an unbroken line to and beyond the time when Dr. Galileo laid aside the pestle and spatula long enough to exercise for a time his inventive faculties and thus gave to the world those very useful articles, the telescope and the microscope, by the aid of which both the minute and vast can be investigated. And this retrospect view suggests the Budha parable in the book of Max Mueller "The living are few, but the dead are many." Coming down to the modern extremity of this medical list, we note in the State of Missouri about six thousand persons who

have the title Doctor of Medicine inseparably connected with their names. It is said that you can unfrock a minister and unwed a husband, but once a doctor always a doctor.

We are told that love is the only thing in the world that can reasonably justify marriage, because love is the only remedy that can overcome all the hardships, misunderstandings and unpleasanties incident to married life. If love and devotion to medical science are not the only incentives that actuate its really successful followers, in the broad sense, they certainly have a prominent place in the make-up of that inspiration, which move medical men to face physical hardships of the most pronounced type, yes, even the greatest dangers to life itself, such as are encountered in epidemics, infections and contagions of the various types; while other vocations, equally inviting in a financial way, less arduous and practically free from physical dangers, are open. Again, a physician's work, like virtue, must sometimes bring its own reward, a reward not in this world's goods, but one that consists of a consciousness of having made an honest effort to relieve suffering, restore to health the afflicted and lift the burden of anxiety and worry that accompanies almost every serious illness. It is a pleasure indeed to a medical attendant to perform such tasks for dependent patients, who are really deserving. "A man's life consisteth not in the abundance of things he possesseth" was the judgment of the wisest teacher of all time.

Doubtless most of you remember



the distinction drawn by Ruskin between the two kinds of work—work done for the sake of the fee, and work done for the sake of the work itself. I believe I am safe in making the statement, that in no other calling within the range of the pursuit of man, is there so much work done simply for the sake of the work, as is found in our profession. And I am not quite sure that the man who works largely for the sake of the work does not on the whole do better work than he who works exclusively for the fee. Be that as it may the man who makes enviable progress in any profession is the man who puts his whole self, his very soul, into his work; and a medical man who would put his whole being into his fee for the sake of the fee, would be a miserly creature indeed: for where a man's treasure is there will his heart be also.

Most physicians being actuated by that "feeling that makes the world akin" know that being kind to the poor and lenient to the unfortunate is a duty and usually a pleasure as well: like Boerhaave who said, "The poor are my best patients—God will be their paymaster." Again the lasting gratitude that sometimes emanates from this class of patients, is the source of a joy to a medical man that the wealth of this world can not purchase. "The tissues of the life to be. We weave with colors all our own, And in the field of destiny We reap as we have sown."

On the other hand, a "doctor must be clothed and fed, and support those depending upon him, just as other people do. The practice of medicine is the work of his life, it

is as honest, useful and legitimate a branch of human industry as any other on the face of the globe; no man earns his means of living more fairly and often more dearly than the hardworked physician—consequently he should, of those who are able to pay, demand and secure just remuneration for his services."

The President of the United States in a recent address said, "The doctor gradually becomes the closest friend to more different people than would be possible in any other profession. The feelings that a man has toward the one human being to whom he turns when in time of sickness for himself, or what is far more important, in time of sickness of those closest and dearest to him, can not but be of a particular kind." The teacher is often mentioned as occupying the position of *loco parentis*, but this intimate relationship that belongs almost exclusively to the medical work goes further in the physician's case and for the time makes him practically as a member of the family, in which capacity he comes into the closest and most sacred relations of life. He sees men and women in their hours of weakness; sees them when the judgment and will power are overthrown by disease: sees them when the intellect is so shattered and enfeebled by morbid conditions that its mastery may be partially or completely lost; and ignoble passions rule unchecked and unrestrained; he sees the trappings of greatness and the cloak that hides deformity dropped; he sees the book of the heart wide open, and hears conversations that would be cruel indeed to rehearse; he becomes the repository of all kinds of



moral and physical secrets: "Therefore in the practice of a great profession, which has become illuminated and exalted by the Christian ideals of the twentieth century, a physician should be a man of sterling integrity and stainless purity, chaste as the untrodden and unsummed snow;" for

"These are the virtues, these the ways,

That bring their own reward.

And to observe them all thy days.

Keep constant watch and guard.

He who from these his guidance takes,

Gives to the race the hope that makes,

The march of man sublime;

And each good deed, each wrong withstood,

Lives in its influence for the good

Throughout all coming time."

The cleaning up of Cuba, performing in a few months what had not been done in four hundred years, is now an old story, but the perennial reaping of that beneficent sowing is continually blessing myriads of people: to the lasting credit of the medical profession, because that work, as is well known, was superintended by Major-General Wood, who is a member of the medical profession.

Yet another and greater public enterprise is now in progress, the digging of the Panama Canal, and to show the import of the medical side of this vast undertaking, if you will permit me I will again quote from the President: "The Panama Canal is a work that only a big nation could undertake or a big nation could do; and it is a work for all mankind. The condition neces-

sary for success in that work is having the proper type of medical work as a preliminary. That is the first condition upon the meeting which depends our success in solving the engineering and administrative problems of the work itself. I am happy to state that the medical work is being admirably done."

That this master stroke in civil engineering is going to be pushed to a successful termination, admits of little or no doubt, and the fact that it is the policy of this government that it shall be for the use of all nations and all people, is but another evidence of the magnanimity of the American nation.

It has been the misfortune of our southern states to have to battle with yellow fever, in a rather severe epidemic, in which more than thirty-two hundred cases have been reported, with a mortality list of about thirteen per cent., to say nothing of the great suffering and hardships imposed by the necessary quarantines, particularly upon the people of the infected district, but more or less on the whole country, by materially interfering with travel and traffic. Just what new medical knowledge of the disease has been acquired during this unpleasant experience of several weeks, it is at present too early to state, but the City of New Orleans is promising that this is to be the last epidemic to originate within her limits, and it is to be hoped that her promise will be kept in good faith.

We have around us gratifying evidences of prosperity; nature has supplied her accustomed yield of grain and fruits, the golden autumn is at hand and conditions favorable

to happiness abound; but in this life of ours bitter and sweet are so strangely blended that when our pleasures appear most complete, recollection often brings a tinge of sorrow.

I am informed that since our last meeting the chain of our membership has been broken, and some of the links have fallen away forever. Namely: Dr. C. A. Mann, of Perryville, one of the pioneer members and organizers and one of the hard-

est workers in the founding of this society, known not only for his medical, but his eloquent and political ability, for whom we all grieve; Dr. J. W. Johnson, of Caruthersville, who was a faithful young member.

In conclusion I desire to sincerely thank the members of the Southeast Missouri Medical Association for their very kind remembrance of me as shown by my election to the office of president at a time that I was absent from the meeting of the society.

## DR. GREGORY AS A PHYSICIAN AND SURGEON.

BY DAVID C. GORE, M. D.

We have assembled to pay our respects to the honored dead, to speak of his virtues, to recount his noble deeds, to forgo the frailties of his race, to strive to emulate his example and pledge ourselves to the heroic task of keeping our noble profession up to the lofty standards which he created for it.

Death is the common leveler, the high and the low, the rich and the poor, the great and the small, the learned and the ignorant all meet upon this common plane, and all alike surrender at his call. In the democracy of the grave all men live equal, the dignity of position, the caste of wealth the neglect of poverty, the inequalities of society have all been surrendered and in the dominion of death all distinctions are forgotten.

And while to day we sigh  
"Alas for the touch of a vanished hand

And the sound of a voice that is still."

let us turn from the shedding of tears and the signs of mourning to a contemplation of the bright example which has been left us by our departed brother, who full of years and of honors has gone on just a little before. Doctor Gregory was no ordinary man; in any sphere in life he would have been great, in his chosen profession he was superlatively great.

A great man has fallen and it is

meet that his fellows should assemble, call attention to that greatness, draw a lesson from his career, endeavor to place our lives on a higher plane, encourage the race to grander deeds and embalm his virtues in our memories to be handed down to future generations.

In honoring Doctor Gregory we honor the race, for we do but call attention to those virtues the possession of which might make us great.

The occasions to memorialize a Doctor and his life come all too infrequent, his deeds, his triumphs, his victories, his momentous decisions involving questions of life and death are all in the privacy of the sick room, and no reporter awaits to herald them to the world, but in an earnest, honest, quiet way he goes about doing good among the children of men and when he goes out from among the people no longer to minister to their suffering, to alleviate their pains or to wipe the death damp from their brow, it matters not what his achievements may have been, what his offerings to the race may have been, he so far as the general public is concerned goes out unhonored and unsung save only in the grateful remembrance of some loyal souls to whom he may have administered and offered the cup of cold water. No Doctor's name adorns the Hall of Fame but the place is left for some less heroic name.



"In as much as ye did it unto the least of these ye did it even unto me" found its translation and its exemplification in the life and character of Doctor Gregory as it has in the lives of few men of our time, he loved humanity for humanity's sake, his skill, his learning and his tender sympathy were ever ready to be extended to the suffering of every class regardless of the fee to follow, in an age of commercialism when money is the universal standard and men are measured by their possessions Doctor Gregory soared above it and lived in an atmosphere where the acquisition of dollars never touched him, but only inquired what was best for the individual and consequently for the race.

He was entirely free from any ambition to operate just to say that he had operated and to be able to report so many thousand operations done, but when he operated it was for the purpose of saving life or limb, no individual ever applied to him for the relief of a fancied grievance and went away with a mutilated body without any corresponding benefit, he had to know that the operation was for the benefit of his patient or no operation was done, he was too busy with the serious affairs of his profession to be a trifler or a trimmer but those who sought his advice went away well satisfied that they had been given the best counsel with all the light which science as interpreted through an honest man could throw upon their cases.

He was not one of the greatest surgeons of the State: he was the greatest, great in conception, great in execution, great in the human sympathy

he brought to bear in his work.

If success is to be measured by dollars, by buildings, by landed estates, by the pomp of place, by the trappings of wealth, then possibly Doctor Gregory's life was a failure, but if,

"True hearts are more than coronets  
And simple faith than Norman  
blood."

then indeed was Doctor Gregory's life a success far beyond his fondest dreams. He was a great teacher, and the inspiration drawn from his teaching has been the foundation stone of the success of many of the most brilliant surgeons not only of the Mississippi Valley but of the entire nation. Recently one of the leading surgeons of your City told me that Doctor Gregory was frequently called into consultation with him and sometimes differed from him in the diagnosis and treatment of his case and it invariably transpired that Doctor Gregory was right and while at the time it sometimes hurt him to have Doctor Gregory advise him to revise his diagnosis and to reverse his treatment yet in the end he had always to go and thank the Doctor for the light he had given him. Doctor Gregory loved power, but it was power which knowledge confers and was never used to another's undoing, but with a tender kindly brotherly love he sought to impart that knowledge to others. The last time I remember to have seen or heard Doctor Gregory was at a meeting of the State Association at Sedalia several years ago, when he earnestly besought the younger surgeons of the State to quit running after fads and get back to

the well-trodden ground of true surgery where the footing was safe and sure, it sounded to me alike the voice of prophecy and revelation.

Doctor Gregory was always the young man's friend, (and he who is not and can not put his hand upon the shoulder of every young man with whom he comes in contact and say this is my friend has missed much in life), he was always ready to assist the young man with his counsel, his advice, when necessary with his pocket book and above all with his tender confidence. No young man ever applied to him for assistance and went away empty handed: advice, counsel, instruction, fatherly teaching, benediction, all flowed freely for the asking, indeed I have sometimes thought that Doctor Gregory kept young by making young men his associates.

He was a high type of citizen, but he always recognized that he was the best citizen who right nobly did his duty in his chosen calling.

He was a loyal friend and no man ever placed confidence in his friendship and had that confidence abused.

Above and beyond and through it all Doctor Gregory was a Christian, and strove earnestly to exemplify in his daily life the teachings of the Nazarene who went about doing good, and who declared "If I be lifted up I shall draw all men after me."

This probably explains the life of the skilful learned kindly fatherly loving man who recognized that,

"He prayeth best who loveth most  
All things both great and small  
For the dear God who loveth us  
He made and loveth all."

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## DR. GREGORY IN HIS CIVIC CAPACITY.

BY HON. A. M. DOCKERY.

It has been a little more than forty years since I first made the acquaintance of Dr. E. H. Gregory. At that time we sustained the relation of teacher, pupil and friend. He was then a distinguished professor in the St. Louis Medical College—commonly known as Pope's Medical College. I was a young student, meager in money and accomplishments but ambitious to win success in life.

During the more than four decades since our initial friendship my admiration for him has grown with

his expanding achievements and strengthened with his ever increasing fund of lovable characteristics. It is therefore, a melancholy pleasure to unite with you in paying a suitable tribute of respect to his precious memory.

As physician, surgeon and benefactor of the human race, he attained national distinction. As citizen, friend and churchman his delightful traits of character were known of all men.

In every movement looking toward the upbuilding of this great

city and of our commonwealth he was among the foremost in civic pride. His splendid intellectuality, broad philanthropy and graces of symmetrical manhood have contributed much to make this the chief City of the Louisiana purchase. In the half century of his residence here he has seen an increase of population, a development of industrial enterprise and an accumulation of wealth greater than all the Colonies possessed when England lowered her flag at Yorktown in acknowledgment of the culminating triumph of the American armies.

As a friend there was none more courageous and loyal. He loved his friends and was bound to them by ties of sincere affection.

A zealous churchman, since young manhood he was identified with the great Catholic church and a powerful agency in the practical work of that world wide organization.

Although the civic accomplishments of our departed friend have been especially assigned me, I feel that I knew Dr. Gregory more intimately in the quiet circle of friendship and of professional life.

He began the practice of his profession as a "Country Doctor." The Country doctor belongs to a class of physicians inured to "rough habits" and sometimes to "coarse diet," but as forceful and influential in the management of affairs as any other class engaged in gainful avocations. I have seen the Country doctor, in the pursuit of his profession out on the hills and the prairies of beautiful Missouri. It mattered not how tempestuous the night or how dreary the day, whether the patient was

rich or poor, these faithful men were always ready to respond with alacrity to the calls of suffering humanity. Strong in the wealth of good common sense and expansive in their charities they ministered with gentle presence at the bedside of the sick. They were open handed in acts of beneficence to the widow and the orphan.

Amid these surroundings of his early life, Gregory laid the foundation of that marvelous professional career stretching back for more than half a century.

Sprung from the plain people it was inevitable that he should develop a self reliance so essential to success in any calling.

I come today to lay a flower upon the grave of my good friend. It is the occasion of real pleasure in this instance that all the flowers, as is frequently the case, were not reserved for the casket. So gentle, so lovable, so exceptional were the services of E. H. Gregory to humanity that many flowers were showered upon his pathway while he was yet with us. I rejoice that this is true. The great profession he honored by an amiable and virtuous life and by eminent successes recognized the semi-centennial of his distinguished career at a banquet given in his honor in this city. The inspiring story of his private and public life was the theme of gifted speakers on that memorable occasion.

But mortality has put on immortality. The great physician has reached the close of this wonderful life and entered upon a still more wonderful life, enduring as eternity.



## DR. GREGORY AS A ST. LOUISAN.

BY W. G. MOORE, M. D.

If, as Emerson says, to be simple is to be great, then, indeed, we have come to memorialize a great man. His life was simple and the elements so mixed in him that nature could stand up and say to all the world, "This is a man." And like the Great Physician before his accusers, no man within the limits of this city, state or nation can say, "I find fault in this man." He was indeed a most remarkable character. If to live in the hearts we leave behind is not to die, then Dr. Gregory is as much present on this afternoon as he has been on many occasions when we have honored him. As a St. Louisan Dr. Gregory needs not a word from me; as a Missourian his name is a household word; as an American his name is known from one end of the nation to the other as the once time honored president of the American Medical Association. He was at one time president of the Missouri State Medical Association and of the St. Louis Medical Society and every honor was accepted with the humility that was characteristic of his life. I remember meeting Dr. Gregory one day on the street and after greeting him and complimenting him on his appearance, he said, "My

sun is fast setting but there is one thing I wish to say to you and that is, that I have lived my life hoping to *deserve* the commendation of my fellow man." What finer encomium could be passed upon any man than that he was living to deserve the good opinion of his fellows. As a St. Louisan Dr. Gregory was the embodiment of good citizenship, of friendship, of the physician's life, of the public servant. There was no position in which he was placed that did not receive benefit because of his occupancy. I share with him a common birthplace; he was born in old Kentucky. More than sixty years ago he left his native place but today the reflections of his life go back to honor the humble home in that old state. His life has been a long, splendid day. His sun has set leaving behind it a halo of glorious memories and noble deeds. No peans of praise that we might sing can make his rest more peaceful or his sleep more profound and in this closing moment I would hold him up as an example and say, let your lives be so ordered that when the evening comes you can "wrap the draperies of your couch about you and lie down to pleasant dreams."

## DR. GREGORY AS A MEDICAL TEACHER.

BY F. J. LUTZ, M. D.

When impartial estimate shall be made by the future historian of the medical men in St. Louis, of the po-

sition which Dr. Gregory shall occupy, next to the singular purity of his long and useful life, his position

as a teacher of medicine and surgery will fall heaviest in the scale. With inherited tendencies for teaching—his father taught school and an uncle on his mother's side taught medicine—Dr. Gregory began early in his career to teach medicine by first teaching himself. It has been well said that Dr. Gregory sprang from the common people, and the common people in those days all braved the difficulties, the troubles and the storms of a new country. He began the practice of medicine after having attended but one course of lectures and with pardonable pride he related to those who were his confidants, how his first book case was a shelf which he himself had hewn. When he came to St. Louis and graduated he immediately began to teach. He taught anatomy for fourteen long years and when finally a position for teaching surgery became vacant, the faculty of his college naturally turned to Dr. Gregory as the most able man who had laid the foundation for the proper teaching of surgery in the study of anatomy.

The limited phase of Dr. Gregory's life as a teacher has been assigned to me, because perhaps, that I like most of you, was one of his pupils and that, like you, I was carried away with enthusiasm, admiring his erudition, his discernment and his conservatism. He taught the principles of surgery and was a great teacher.

He was a great surgeon because he understood the principles of surgery. There were many more clever operators, there were better mechan-

ics in his day and before him, I dare say, with due respect to my colleagues, that there are today better mechanics among them than Dr. Gregory, but there never was a better surgeon. There never was a surgeon who better understood the deviations from the normal than Dr. Gregory, because his knowledge was based on experience acquired in the practice of medicine and in the anatomic laboratory. He did not learn surgery by practising upon his patients what he should have learned before he began the practice of surgery.

Dr. Gregory did not belong to that class of men who introduce striking new ideas or new methods of thought or discover unsuspected treasures of knowledge; he was rather one of those teachers who have a faculty for clearing, for crystalizing, for presenting in simple form the most difficult problems with which the medical man is concerned, and those who had the pleasure of sitting at his feet as students will recall how clearly, comprehensively and simply he presented the most difficult problems. He had a philosophic grasp of the science and practice of medicine. He diffused knowledge which he had sifted and verified and he incited others to medical work. He possessed in an extraordinary degree the faculty of simplifying, systematizing and imparting knowledge.

He taught not only in the lecture room. Those of us who began the study of medicine many years ago hardly realize the position of the student of today. Then walking the

wards was one of the methods of imparting knowledge. Dr. Gregory taught surgery at the bedside, and he taught it in a more impressive manner than any teacher it has ever been my pleasure to follow. His wonderful sagacity in making a diagnosis made it to the young mind so simple that rarely a student left the college but he was determined to become a surgeon.

But he taught more than surgery; he taught the duties and responsibilities of medical men to themselves.

Dr. Gregory possessed few, if any, of the characteristics of the leader. He was not an aggressive man, he was not a bold man; he was shrinking in his disposition and yet in the thirty years of my knowledge of him no name was one to conjure with like Dr. Gregory's. The flag placed in his hands by the profession of the state had more followers because he bore it, and he carried the flag and had more followers because every man who knew his name was convinced that he stood for what was highest, for what was best in the profession. He was a "no compromise" man. He never yielded a principle. When there were dark days for the profession, when legislative enactments had been passed and the profession was divided as to the wisdom of the enactments, when the then chief executive looked about for a man of sufficient caliber to have placed in his hands this power, dangerous as well as beneficial, all eyes looked to Dr. Gregory and he said: "Dr. Gregory you must accept the Presidency of the State Board of Health." Dr. Gregory re-

plied, "I have never shirked a professional responsibility. I am incompetent to do this work. I have no executive ability, but if my profession calls me, I will do the best I can." He started the organization for the benefit of the profession and the citizens of this state. He taught us to organize ourselves. He was one of the most regular attendants at the St. Louis Medical Society until advanced age compelled him to attend less frequently. Twice he was elected its president, many times its representative to the national conventions. Always a faithful attendant upon the meetings of the State Association, he taught us that by unity, by organization we could accomplish more readily that high mission which is ours, and he taught long after he ceased to practice medicine.

He had seen the changes from the day when chloroform and ether were just being introduced into general practice down to the day when modern surgery was placed almost upon a scientific basis.

He always spoke of himself as an old man. He was an old man thirty years ago—to hear him tell it—but he was abreast of his times and he was young and remained in contact with the young. No man could teach surgery for fifty years without being a friend of the young man, and who that was his student, who that came in contact with him but was his friend. It would ill become some of us to recite in public what we owe to Dr. Gregory. I will only say that no young man ever asked the advice or the help of Dr. Gregory who was



not accorded it fully and to the best of Dr. Gregory's ability.

He loved his profession, he loved his city, he was in love with the teaching of his profession. He taught surgery at a time when only the sluggard, when only the dull fellow, was obliged to attend college for more than two full terms of four months. Gradually the standard of our professional attainments was raised and he kept pace with the advancement of medical education and was in the forefront when it meant financial loss each year for him to be a teacher of surgery.

Those of us who were admitted more intimately to the enjoyment of his society during the later years of his life cannot but recall with pleasant emotions his discourses which breathed the full sense of restfulness and sweetness of memory directed backward over a long and well spent life. He enjoyed to its full extent life. His career was well rounded and complete.

Much of what I have said is commonplace but it is Dr. Gregory as I saw him, and I saw him long and I saw him often. I know that he was not unkind to anybody, that he loved his profession, that he was proud of those ideals which to him were a daily inspiration; and if good deeds, if constancy, if fidelity to the standards by which we measure men count for anything, then, indeed, Dr. Gregory had no equal.

## BRIEF REMARKS.

BY A. W. MCALESTER, M. D., COLUMBIA.

I did not come to this memorial service as a speaker upon this occasion; hence my remarks are impromptu.

Did I not, Mr. President, arise at your request I would be recreant in my duty as a former pupil, not to pay my respect and show my love for one who stood so prominent as a teacher in medicine. Of him, much might be said; much might be written; but his fame rests in the arduous labor of things done. He labored to impart in a clear and concise manner the truths in medicine which he had accumulated as the result of long years of toil and research. He taught the great principles of surgery and showed the details in a given case. He tried and proved all things and held fast to that which was good. Of him it might be truthfully said that he never performed an unnecessary operation. A happy thought. All these things marked him as a great teacher. His fame extends to wherever medical literature is read and will extend to wherever the good names of good men go. It has been truly said, his life was one of faith, hope and charity. Many are the witnesses here to testify to his love for mankind.

"Cold in the dust the cherished heart may lie,

But that which warmed it once, can never die."

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## EDITORIAL.

### THE JEFFERSON CITY MEETING.

The indications are that the coming meeting of the Missouri State Medical Association will be the largest and most enthusiastic ever held by the Association. The scientific work will be held in two sections. The medical section in the House of Representatives and the surgical section in the Senate Chamber. Besides the President's address, oration on surgery and oration on medicine more than sixty papers will be presented.

Jefferson City is probably the most desirable place in the State for the annual meeting, not only because the capitol building furnishes a most excellent meeting place, but the hotel accommodations are better than in any other town of its size in Missouri.

The railroads have made a rate of 1½ fare for the round trip, and it is expected that special trains will be run from St. Louis, Kansas City and St. Joe. It was the intention of the Association to have no entertainments, but the Cole County Medical Society, which constitutes the committee on arrangements, have decided to have a reception at the Governor's mansion on the evening of the second day, a visit to the penitentiary and supper for all in attendance. On the afternoon of the last day, after the conclusion of the scientific program, the members of the association will

be treated to a carriage drive and luncheon at the park.

The membership of the State Association is considerably over 2,000 and it is fully expected that at least 750 will be in attendance. It should be not only the pleasure but the duty of every medical man in the State to make an effort to have this the most successful meeting the Association has ever known.

### MALPRACTICE SUITS.

The prevalence of malpractice suits emphasizes the much needed reform in this phase of legal medicine. While the payment of damages is not so frequent, yet the inconvenience, and loss of time brought about by the wiles and trickery of the unprincipled attorney are exceedingly annoying to the busy physician. The length of time in which such a suit may be brought against the physician is conducive to such prosecution. These prosecutions are usually brought some years after the alleged injury or maltreatment and frequently the physician has all but forgotten the patient and unless he has kept an accurate history, cannot recall the circumstances connect-

ed with the case. The period in which prosecution may be brought about varies in different states, from two to six years. In Missouri it is five years. There are few doctors who at the end of five years will be able to recall in detail the history of the case even though he has kept a record. Moreover in these five years complications might occur which are not at all incidental to the case. Again the nurse in charge and his assistants may have gone to some distant city so that it is difficult to get the testimony as to what was done. Therefore, the length of time in which suit may be filed should be reduced to a minimum. In Wisconsin notice must be given of the proposed legal action within one year. Better still is the law in Delaware which states that suit must be brought within one year to recover damages. One year is a reasonable length of time as it gives the physician an opportunity to look up the details incident to the case and to call for the testimony of those who assisted in taking care of the patient. The physicians over the State should agitate this proposed revision for it is simply a step urged in self defense. The physician may style himself most fortunate if he is not some time in his career a defendant in a malpractice suit and it is incumbent on him to have everything possible in his favor, for it is a notorious fact that in some localities a physician defendant in court is but meat to the jury, so it is necessary that as far as possible he should erect the strongest possible barrier for his defense. It is hoped that the next legislature will give

this problem due consideration and something be done towards eliminating this five year limit in which under the present law action may be brought. The Committee on Public Health and Legislation of the Missouri State Medical Association should be composed of men who will devote much time and labor to the passage of this law of greatest importance to the profession.

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#### NOTICE.

To all Graduates of Rush Medical College. There will be a banquet held in the dining room of the Madison House, Jefferson City, on Wednesday, May 16th at 6 o'clock p. m., the second day of the meeting Missouri State Medical Association. All Rush Members are urged to be present. Dr. J. M. Dodson, Dean of Rush Medical College, will be present with all the news from our Alumni Mates and a rousing good time is assured.

Come to Jefferson City, May 15, 16 and 17.

(Signed) Committee.

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#### REPORT BLANKS.

Early last month addressed return post cards were sent to the secretary of every affiliated society in the State requesting that he fill out the blanks and return. In some instances this has not been done. It is to be hoped that the information will be forwarded without further delay.

#### ANNUAL DUES.

With few exceptions the affiliated county societies through the proper officer, have furnished rosters of members and forwarded to the sec-



retary of the State Association, dues for 1906. It should be borne in mind that the names of additional members may be added to the list up to May 18th at which time the Journal containing a complete list of members will go to press.

In several instances individual members have sent dues but in each case the amount has been returned as dues cannot be received through others than the proper officer of an affiliated society.

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### PURGING THE PROFESSION.

The Committee on Public Health Medical Society has reported the progress made and the results likely to be attained as a result of the action recently taken by the Society in employing counsel for the purpose of purging the profession of charlatans. Prior to the action thus taken the society had already authorized attorney Barth to prosecute certain violators of the ordinance forbidding obscene newspaper advertisements, and several physicians had been arrested on information charging a violation of this ordinance. It was stipulated that the case against Dr. Nathaniel K. King might be accepted as the test case and the others then pending bide the result of that case. Dr. King had advertised the treatment of venereal and all private diseases of men. The defense admitted the publication but attacked the constitutionality of the ordinance. The case was tried and argued before Judge Tracy and defendant was fined. The case was appealed to the court of criminal

correction where "Dr. King" suffered a similar fate at the hands of Judge Hiram Moore. The case was then appealed to the Supreme Court of the State where it is now pending. Thereafter the attorney was authorized to proceed against the newspapers which published this obscene matter. Informations were prepared and presented against all of the newspapers in the city, but here again, the constitutionality of the ordinance having been brought into question, it was considered proper by the authorities to proceed against only one of these. It resulted that 'the St. Louis *World*' was selected as the publication against which the information should issue and accordingly it was brought into court to answer charges for violation of the city ordinance. Recently a fine was adjudged in this case and the '*World*' promptly appealed. These prosecutions successfully begun, soon bore their fruit. Advertising physicians hesitated to continue in their flagrant violations of the law, in spite of the fact that they had put at issue the question of its constitutionality, and the newspapers began to discourage the use of terms which stamped the advertisements so inserted as being clearly obscene and illegal. The consequence is that the space devoted to this sort of advertising has materially decreased, with the farther result that the business of many of these advertising physicians has been diminished by almost one-half. Realizing that a beginning had been *really* made, that *results* had actually been accomplished, the society

took active steps looking to the ways and means for continuing the crusade. The committee on public health and legislation together with a special committee, were appointed and authorized to receive funds to this end. On the 24th of March a resolution was adopted directing Mr. Barth "to proceed actively to secure the enforcement of the law against persons engaged in illegal or criminal forms of medical practice." Scarcely a month has elapsed since the attorney was empowered generally to act, yet the committee briefly reported the following results attained: On April 12th at the meeting of the state board of health in this city the licenses of two midwives and one physician were revoked on the ground of "dishonorable and unprofessional conduct." Of these Anna Newland and Abram Peeler had been convicted in the Federal Court for sending non-mailable matter through the mails and for advertising medicines and devices for the prevention of conception. Matilda Meyers, the other, had been convicted in the State Court for procuring an abortion. Though convicted criminals, these charlatans were suffered to continue unmolested in the practice of the profession. They were heard before the board with the result that they must now forfeit their professional privileges. Should they practice again they will be prosecuted under the law forbidding the practicing of medicine, surgery or midwifery without a license from the board. Another midwife, Mary Murphy, had been served with charges re-

quiring her appearance before the board at the same time, yet on request of her attorney the case was continued until its meeting in Kansas City on May 2nd. Here it may be said that it will be the policy of the committee as advised by its counsel to attempt to secure the revocation of license through the board of health in preference to convictions in the courts. The end sought to be attained is the forfeiture of professional privileges belonging to those who are proved to be unworthy to have them. There is no purpose to be vindictive. A revocation of a license accomplishes this end without the necessity of a criminal conviction. Moreover, the latitude of investigation is broader before the board, but as regards the character of the offense charged and the method of procedure, what might not be established as a crime in the courts may yet be proved to be "dishonorable or unprofessional conduct" before the board. In addition to the revocations already had, nine midwives have been arrested on information charging their advertising as physicians. These advertisements easily deceive the unsuspecting girl who in the faith thereof would seek the treatment of a lady physician, whereas in fact she is under the care of a midwife only. One of these has already plead guilty and has been fined; the others will be heard the first and second week in May in the Court of Criminal Correction. Further, the attorney has now prepared an information for the ouster

of so-called "Medical Companys" from the exercise of corporate franchise. This will be filed early next week and will test the right of individuals to unite in corporate form for the purpose of practicing medicine and surgery. It is needless to add that a final decision on this question will be far-reaching. As further evidence of progress it may be said that negotiations have been in course with the postal authorities looking to their assistance for prosecutions in the illegal use of mails. Postmaster General Cortellou has given every assistance to our attorney and stated that careful attention would be given any evidence of the violation of the postal laws. In addition the committee has authorized the attorney to prepare a brief to be submitted to the Attorney General relative to the construction of the statute regulating the practice of midwifery. Other matters are being considered which must be the subject of a later report. Legislation both city and state is needed to correct and supplement the inadequacy and inefficiency of the present laws. The attorney is just now considering the drafting of an ordinance aimed to reach a certain class of charlatans who may escape under the law as it now stands.

The field of action is immense. It broadens as the work progresses. But the evils must be eradicated. No efforts should be spared, no stone left unturned. We urge that every physician cherishing the ideals of his profession report to this committee every case which may furnish evidence of crime perpetrated or of

conduct unprofessional or dishonorable and the matter will be promptly referred to the attorney for action. We recommend that a fund be raised in keeping with the great importance and stupendous character of the undertaking. We would stamp out every vestige of the nefarious practice of the traitor to his calling. We would purify the profession and strike at him who in his crime undermines society and retards civilization and progress. Discourage race-suicide by educating and arousing the public; prevent abortion by making it possible to punish him who shames his profession and does violence to the laws of his state.

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Will the Missouri State Medical Association insist in having passed by the next legislature an act in substance as follows:

#### A MODEL "ACT."

TO REGULATE THE MANUFACTURE AND SALE OF "PATENT" AND "PROPRIETARY" MEDICINES.

BE IT ENACTED by the legislature of the State of Missouri.

Section 1. Each package, bottle, box or other parcel containing what is commonly known as a "patent" or "proprietary" medicine of any kind or in any form, intended for internal consumption by human beings, other than a medicine specially compounded upon the written order or prescription of a physician duly authorized to practice his profession in this State, which shall be hereafter manufactured within this State, or which shall be hereafter manufactured without this State and exposed or offered for sale or



sold or given away, or otherwise disposed of, within this State, shall have both on the outside wrapper of such package, bottle, box or other parcel, in plain English, printed in black letters on white paper, of a size not smaller than of type eight point, so called, a complete schedule showing all the ingredients contained in such "patent" or "proprietary" medicine, and the exact proportions of each ingredient thereof.

Section 2. Whenever any such "patent" or "proprietary" medicine shall contain more than eight per cent. of ethyl alcohol, or more than one-twenty-fifth of one per cent. of morphine, heroin, cocaine, or of the salts or equivalents or derivatives of the same or any quantity of belladonna, cotton-root, ergot, or other abortifacient, there shall be printed in plain English, in red letter of a size not smaller than eight point, so called, on white paper, in addition to the schedule of ingredients hereinbefore required, both on the outside wrapper of the package, bottle, box, or other parcel containing the same, also on the label affixed to such package, bottle, box or parcel, a notice reading as follows:

"This package (or bottle or box or parcel as the case may be), contains (here give the name and proportion or percentage of the drug as the case may be), and is therefore under the Act of the Legislature of the State of Missouri marked "Poison" and also the single separate word "Poison" which shall be printed separately on a line by itself, in bold-face type, and in letters not less

than one-quarter of an inch high.

Section 3. The Board of Health of this State is hereby empowered, immediately upon the passage of this Act and from time to time, thereafter, to make or cause to be made, a chemical analysis of "patent" or "proprietary" medicines, manufactured, or exposed or offered for sale, or sold or given away, or otherwise disposed of, within this State for internal consumption by human beings, other than those specially compounded upon a physician's written prescription as aforesaid. If any such analysis shall show that there has been, with respect to any such "patent" or "proprietary" medicine a failure to comply with the requirements of this Act, said Board shall at once notify the District Attorney of any county in this State in which the said "patent" or "proprietary" medicine is manufactured, or exposed or offered for sale, or sold or given away, or otherwise disposed of, whose duty it shall be to prosecute the person, firm or corporation so violating the provisions hereof.

Section 4. Any changes, either in the ingredients or in the proportions or percentages of the ingredients in any such "patent" or "proprietary" medicines manufactured within this State, shall be at once reported by the manufacturer thereof to the Board of Health of this State.

Section 5. Any person, firm or corporation who shall manufacture, or expose or offer for sale, or sell, or give away, or otherwise dispose of any such "patent" or "proprietary" medicine within this State in violation of the provisions of this Act, or any of them, shall be guilty

of a misdemeanor and on conviction thereof shall be punishable therefore by a fine of not less than fifty dollars (\$50) nor more than five hundred dollars (\$500), or imprisonment for not less than thirty (30) days nor more than six (6) months or both.

Section 7. All Acts or parts of Acts inconsistent herewith are hereby repealed.

Section 7. This Act shall take effect on the.....day of.....1906.

### A BATTUE OF QUACKS.

#### THE PERNICIOUS QUACKS.

who have been operating in alliance with certain newspapers have met with a wholesale calamity in New York. The United States postal authorities, the police, and the County Medical Society bowled fifty-two of them over in one day. These persons had all depended upon newspaper publicity for the means of carrying on their criminal trade. Their column was one of the richest sources of revenue possessed by each of their journalist allies. One day a Post-office Inspector took one of these organs of public enlightenment, went down the medical column, and wrote fifty-two letters, each signed "Hattie Sander-son," and each detailing such symptoms as always appeal to the predatory instincts of an advertising quack. He got fifty-two replies. Thereupon all the writers were notified that if they wanted their letters they must come to the Post-office and be identified. Forty-three came and were told that their mail would be held until they made affidavit that it belonged to them. Not

one of them would take the risk of committing himself to such a statement.

The Post-office Department promptly denied the use of the mails to the entire lot of fifty-two medical letter-writers. Better yet, it moved upon their journalistic accomplices. The three newspapers that had fattened upon the sufferings of credulous ignorance were sharply notified that unless they stopped advertising the blacklisted fifty-two they would have to circulate their issues without the help of the postal service. The advertisements were immediately dropped, and those papers became cleaner than their readers had seen them for many a year. Incidentally, three of the quacks were indicted; others took hasty excursions to distant climes, and others confessed and promised to reform. Some refused to give up and tried to keep their hold on their business with the help of fresh advertisements. If they fail in this they must seek some other form of knavery, for the quack doctor business can not be made to yield wealth without newspaper help.

Incidentally, the way of the vender of "proprietary "braces" has been made hard in Connecticut. Under the recent ruling of the United States Commissioner of Internal Revenue, druggists and others who sell alleged medicines containing more than a certain percentage of alcohol must take out retail liquor dealers' license. Although that is unpleasant for the dealer, it can be borne, as such a license costs only \$25. But now the County Commis-

sioners of Connecticut have decided that every store-keeper who takes out a national license must get a State license too, and that is a commodity that costs from \$250 to \$500 a year. The logic under Connecticut's action fits all other states equally well. In high license states it means high license for the dispensers of Peruna Cocktail and in prohibition States prohibition. It would be practical prohibition in many regions, for the alcoholic medicine habit has to be pretty widespread before it can make a double license profitable.—(*Collier's Weekly*).

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#### WANTED.

A copy of the British Medical Journal, issue of January 17, 1903, to complete our files. Address

ST. LOUIS MEDICAL LIBRARY,  
3525 Pine St., St. Louis.

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#### OBITUARY.

##### IN MEMORIAM.

Dr. C. A. Snodgras was born on a farm in Jackson County, Missouri, in 1858, and died in St. Louis April 6th, 1906. Dr. Snodgras was for many years principal of the high school of Marshall, Mo. While a school teacher in Marshall he mar-

ried Miss Anna Gamble who with his two children, Alvin and Dorothy, survive him. Dr. Snodgras came to St. Louis in 1898 and while still a medical student was appointed city bacteriologist; later he was appointed health commissioner. He had not passed on life's highway, the stone that marks the highest point; but being weary for a moment, lay down by the way side, and using his burden for a pillow, fell into that dreamless sleep that kisses down the eye lids still. While yet in love with life and raptured with the world, he passed into silence. This brave and tender man in every storm of life was oak and rock; but in the sunshine he was vine and flower. He loved the beautiful, he sided with the weak, the poor, the wronged, and lovingly gave alms. With loyal heart and with the purest hands he faithfully discharged all public trusts. Life is a narrow vale between the cold and barren peaks of two eternities. We strive in vain to look beyond the heights. We cry aloud and the only answer is the echo of our wailing cry. From the voiceless lips of the unreplying dead there comes no word; but in the night of death, hope sees a star and listening love can hear the rustle of a wing. There was, there is, no gentler, stronger, manlier man.



## MISSOURI STATE MEDICAL ASSOCIATION.

Jefferson City, May 15, 16, 17, 1906.

## OFFICERS, 1906.

## PRESIDENT.

D. C. GORE, M. D. .... Marshall, Mo.

## VICE PRESIDENTS.

C. D. AVERY, M. D. .... Troy

J. P. BURKE, M. D. .... California

F. A. GLASGOW, M. D. .... St. Louis

T. F. LOCKWOOD, M. D. .... Butler

E. LOWREY, M. D. .... Excelsior Springs

## SECRETARY.

C. M. NICHOLSON, M. D. .... St. Louis

## ASSISTANT SECRETARY.

E. J. GOODWIN, M. D. .... St. Louis

## TREASURER.

J. F. WELCH, M. D. .... Salisbury

## COMMITTEES.

## ARRANGEMENT COMMITTEE:

S. V. Bedford

C. P. Hough.

J. B. Martin.

W. A. Clark.

L. T. Leach

O. L. Moore.

C. Enloe.

J. E. Lopp.

W. W. Norwood.

I. N. Enloe.

A. W. McAlester.

J. P. Porth.

G. Etnmueller

J. A. Hill.

E. R. Son.

J. L. Thorpe.

S. C. Yates.

## COMMITTEE ON SCIENTIFIC WORK.

C. M. Nicholson.

E. L. Chambliss.

A. R. Kieffer.

## PUBLICATION COMMITTEE.

C. M. Nicholson.

F. J. Lutz.

B. M. Hypes.

W. B. Dorsett.

## COMMITTEE ON PUBLICATION AND LEGISLATION.

F. J. Lutz.

W. S. Allee.

H. E. Pearse.

## COUNCILLOR DISTRICTS.\*

First District—F. B. Miller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox. *Lewis*.

Second District—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District—E. H. Miller, Liberty. Counties: Clay, Ray, Platte, Clinton, Caldwell, Gentry, Harrison, Worth, Daviess. *DeKalb*.

Fourth District—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, Reynolds, Iron, Perry, St. Genevieve. *St. Francois*.

Tenth District—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District—W. D. Porterfield, Jr., Cape Girardeau. Counties: Scott, Madison, Cape Girardeau. *Bollinger*.

Twelfth District—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, Cooper. *Hickory*.

Fourteenth District—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Barton, Cedar, Vernon. *Dade*.Sixteenth District—R. L. Johnson, Rolla. Counties: Crawford, Phelps, Pulaski, Laclede. *Dent, Dallas*.Seventeenth District—J. E. Tefft, Springfield. Counties: Greene, Lawrence. *Christian, Stone, Barry, Webster, Polk, Taney*.Eighteenth District—H. C. Shuttee, West Plains. Counties: Howell, *Ozark, Oregon, Texas, Wright, Shannon, Douglas*.

\*Counties in italic are unorganized.

HOUSE OF DELEGATES.

COUNTY.	DELEGATE.
Adair.....	A. E. Grim
Andrew.....	D. B. Bryant
Audrain.....	R. W. Berry
Barton.....	T. H. Duckett
Bates.....	A. E. Lyle
Benton.....	S. O. Davis
Boone.....	A. R. McComas
Buchanan.....	T. H. Doyle
Butler.....	Ira W. Seybold
Caldwell.....	Tinsley Brown
Callaway.....	N. F. Baker
Camden.....	S. Mills
Cape Girardeau.	R. F. Wichterich
Carter-Shannon.....	P. D. Gun
Cass.....	J. S. Triplett
Cedar.....	Chas. A. Edgar
Chariton.....	J. H. P. Baker
Clay.....	H. Rowell
Clinton.....	Robt. W. Rea
Cole.....	J. L. Thorpe
Cooper.....	R. L. Evans
Daviess.....	H. E. Songer
Franklin.....	Chas. F. Briegleb
Gasconade-Maries-Osage	W. E. Seba
Gentry.....	C. N. Barger
Grundy.....	W. H. Winningham
Harrison.....	A. H. Vandivert
Henry.....	Wm. H. Gibbins
Holt.....	B. T. Quigley
Howard.....	C. O. Lewis
Howell.....	J. W. Bingham
Iron.....	Ira E. Marshall
Jackson	F. L. Cook
	N. P. Wood
	J. M. Frankenburger
	William J. Frick
	Herman E. Pearse
Jasper.....	F. E. Murphy
Jasper.....	R. L. Neff
Jefferson.....	A. H. Hamel
Johnson.....	J. I. Anderson
Knox.....	Henry J. Jurgens
Laclede.....	J. A. McComb

COUNTY.	DELEGATE.
Lafayette.....	C. T. Ryland
Lawrence.....	C. A. Moore
Lincoln.....	C. D. Avery
Linn.....	D. F. Howard
Livingston.....	Reuben Barney
Madison.....	S. C. Slaughter
Marion.....	Thos. Chowning
Mercer.....	Chas R. Buren
Miller.....	W. S. Allee
Mississippi.....	G. R. Wallace
Moniteau.....	W. R. Patterson
Monroe.....	T. B. Lloyd
Morgan.....	A. J. Gunn
Newton.....	R. C. Lamson
Nodaway.....	E. L. Crowson
Pemiscot.....	M. D. Hendrix
Perry.....	J. W. Russell
Pettis.....	W. J. Ferguson
Phelps.....	S. L. Baysinger
Pike.....	T. Guy Hetherlin
Platte.....	Spence Redman
Putnam.....	J. A. Townsend
Ralls.....	T. J. Downing
Ray.....	C. B. Shotwell
Saline.....	J. E. Harris
Schuyler.....	W. F. Mitchell
Scotland.....	A. E. Platter
Shelby.....	Charles Chapman
Ste. Genevieve...	G. M. Rutledge
St. Louis.....	Roy D. Moore
St. Louis City	P. Y. Tupper
	J. S. Myer
	J. C. Morfit
	W. W. Graves
	W. H. Stauffer
	M. B. Clopton
	H. W. Soper
Stoddard.....	F. L. Henderson
	John Green, Jr.
Stoddard.....	T. C. Allen
Vernon.....	J. Robert Buchanan
Washington.....	W. S. Smith
Wayne.....	W. F. Bailey
Worth.....	W. E. McKinley

## NOTICE.

Medical and Surgical Section will be held at the Capitol Building. Physicians in attendance will please register with the Registration Committee immediately upon their arrival.

It is necessary for the certificate to bear the signature of the Secretary and Joint Agent before it will be honored by the ticket agent for reduced return fare.

It is especially desired that the members be prompt in their attendance at all sessions, which will be called to order at the hour fixed on the Program.

All papers must be typewritten and should be handed to the Secretary of the Section as soon as read.

No paper will be allowed to occupy more than twenty minutes in its reading. Speakers designated to open discussion may speak seven minutes, general discussion five minutes, and ten minutes for closing the discussion by the essayists. No one may speak the second time on one subject without the unanimous consent of the members present.

## MEETING PLACES.

Surgical Section meets in Senate Chamber.

Medical Section meets in House of Representatives.

## ENTERTAINMENTS.

Wednesday evening, six o'clock. Supper at Penitentiary.

Wednesday evening, nine o'clock. Reception at the Governor's Mansion.

Thursday afternoon, five-thirty. Drive to the Park and Luncheon.

## HOTEL RATES.

Madison House—Headquarters—\$2.00 to \$3.00. American plan.

Monroe Hotel—\$2.00 to \$2.50. American plan.

Central Hotel—\$2.00 to \$2.50. American plan.

Elston House—\$1.50 per day. American plan.

City Hotel—\$1.00 per day. European plan.



## PROGRAM.

TUESDAY, MAY FIFTEENTH.

House of Delegates called to order at 10:30 a. m.  
 Judicial Council called to order at 10:30 a. m.  
 Roll call and announcement of result.  
 Reading of minutes of previous meeting.  
 Reading of President's message and recommendations.  
 Report of Committee on Medical Education.  
 Report of Committee on Arrangements.  
 Report of Committee on Scientific Work.  
 Report of Committee on Public Health and Legislation.  
 Report of Publication Committee.  
 Report of Treasurer.  
 Report of Secretary.  
 Election of Committee on Nomination.

## REPORT OF COUNCILLORS.

1st District.....F. B. Miller, Kahoka  
 2nd District.....J. D. Brummall, Salisbury  
 3rd District.....E. H. Miller, Liberty  
 4th District.....C. H. Wallace, St. Joseph  
 5th District.....L. W. Dallas, Hunnewell  
 6th District.....Woodson Moss, Columbia  
 7th District.....W. B. Dorsett, St. Louis  
 8th District.....F. J. Lutz, St. Louis  
 9th District.....B. M. Hypes, St. Louis  
 10th District.....J. J. Norwine, Poplar Bluff  
 11th District.....W. D. Porterfield, Jr., Cape Girardeau  
 12th District.....W. S. Allee, Olean  
 13th District.....R. D. Haire, Clinton  
 14th District.....M. P. Overholser, Harrisonville  
 15th District.....A. R. Snyder, Joplin  
 16th District.....R. L. Johnson, Rolla  
 17th District.....J. E. Tefft, Springfield  
 18th District.....H. C. Shuttee, West Plains



**MEDICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

MORNING SESSION, 9 O'CLOCK.

- The White Plague.....H. Jarard, Pleasant Hill  
 Discussion opened by W. S. Alee, Olean.
- Albuminuretica.....C. O. Lewis, Fayette  
 Discussion opened by Kimball Hill, Eldorado Springs
- Arteriosclerosis.....Tinsley Brown, Hamilton  
 Discussion opened by M. O. Biggs, Bowling Green
- The Therapeutics of Eczema.....W. J. Frick, Kansas City  
 Discussion opened by S. M. Brown, Monroe City.
- Missouri Sanatorium for the Treatment of Incipient Tuberculosis, and  
 its Legal Foundation.....W. M. Bayliss, Mt. Vernon  
 Discussion opened by Wm. Porter, St. Louis.
- Treatment of Adenoids by the General Practitioner  
 W. E. McKinley, Denver  
 Discussion opened by H. A. Booth, Pacific
- Neurasthenia, Traumatic and Idiopathic: Its Pathology and Progno-  
 sis.....David S. Booth, St. Louis  
 Discussion opened by R. D. Ramey, Garden City.
- Etiology and Cure of Hysteria.....E. F. Walter, Perry  
 Discussion opened by A. B. Freeman, Joplin
- State Medicine.....C. M. Mitchell, Blythedale  
 Discussion opened by L. W. Dallas, Hunnewell.

**MEDICAL SECTION**

THIRD DAY—THURSDAY, MAY 17TH.

AFTERNOON SESSION, 1:30 P. M.

- Medical Reformation.....J. S. Triplett, Harrisonville  
 Discussion opened by C. B. Hardin, Kansas City.
- Etiology of Pneumonia .....A. J. Detweiler, Hannibal  
 • Discussion opened by B. H. Zwart, Kansas City.
- Histology of Pneumonia.....Frank J. Hall, Kansas City  
 Discussion opened by M. P. Overholser, Harrisonville.
- Diagnosis of Pneumonia.....Robert T. Sloan, Kansas City  
 Discussion opened by W. E. Fischel, St. Louis.
- Treatment of Pneumonia.....W. G. Moore, St. Louis  
 Discussion opened by E. W. Schauffler, Kansas City.
- Gas Bacillus Infection: the Clinical Results of the Development in the  
 Bacillus Aerogenes Capsulatus....Ernest E. Robinson, Kansas City  
 Discussion opened by J. R. Mudd, St. Charles.
- The Importance of the Sigmoid Flexure in the Production of Enter-  
 optosis, Pelvic Displacement and Reflex Phenomena.  
 J. M. Allen, Liberty  
 Discussion opened by D. B. Bryant, Savannah
- The Treatment of Gastric Ulcer.....Franklin E. Murphy, Kansas City  
 Discussion opened by G. A. Greeson, Lincoln
- Collection of Human Embryos in the Anatomical Laboratory of the  
 University of Missouri.....C. M. Jackson, Columbia
- Pericardial Effusion.....W. J. Calvert, Columbia



## SURGICAL SECTION.

SECOND DAY—WEDNESDAY, MAY 16TH.

MORNING SESSION, 9 O'CLOCK.

- Ectopic Pregnancy.....O. B. Campbell, St. Joseph  
 Discussion opened by J. F. Cherrington, Chillicothe
- Epithelioma of the Lip.....J. J. Claussen, Kansas City  
 Discussion opened by R. E. Schlueter, St. Louis.
- Abdominal Injuries.....H. C. Dalton, St. Louis  
 Discussion opened by W. J. Frick, Kansas City.
- Suprapubic Cystotomy as Preliminary to and as a Route for the Performance of a Considerable Number of Prostatectomies.  
 W. T. Elam, St. Joseph
- Discussion opened by Bransford Lewis, St. Louis.
- Spina Bifida.....J. D. Seba, Bland  
 Discussion opened by T. C. Boulware, Butler.
- Some Remarks on the Treatment of Chronic Joint Disease  
 M. M. Edmondson, Kansas City
- Discussion opened by Phil Hoffman, St. Louis
- Surgical Aspects of Typhoid Fever.....C. G. Kirchner, St. Louis  
 Discussion opened by J. F. Binnie, Kansas City.
- Suppuration of the Superior Maxillary Sinus with Involvement of Ethmoidal Cells and Sphenoidal Sinuses.....H. Jurgens, Edina  
 Discussion opened by H. W. Loeb, St. Louis.

## SURGICAL SECTION.

SECOND DAY—WEDNESDAY, MAY 16TH.

AFTERNOON SESSION, 1:30 P. M.

- An Unusual Retroperitoneal Tumor in the Mesocolon Simulating a Fibroid of the Uterus.....W. B. Dorsett, St. Louis  
 Discussion opened by C. G. Geiger, St. Joseph.
- Pyuria.....E. G. Mark, Kansas City  
 Discussion opened by A. R. Snyder, Joplin.
- Limitations of Surgical Procedures in Cancer...G. W. Broome, St. Louis  
 Discussion opened by C. Lester Hall, Kansas City.
- The Limitations of Surgical Interference. Ernest von Quast, Kansas City  
 Discussion opened by H. Talbot, St. Louis.
- Some Questions Concerning the Treatment of Uterine Fibromyomata.  
 H. S. Crossen, St. Louis
- Discussion opened by H. C. Crowell, Kansas City.
- The Treatment of Retroflexion of the Uterus. A. F. Hertzler, Kansas City  
 Discussion opened by Robert Funkhouser, St. Louis.
- Some Recent Advances in Ophthalmology.....J. M. Ball, St. Louis  
 Discussion opened by B. E. Fryer, Kansas City.
- Rectal Abscesses.....J. M. Frankenburg, Kansas City  
 Discussion opened by W. H. Stauffer, St. Louis.

SECOND DAY—WEDNESDAY, MAY 16TH.

GENERAL SESSION, 7:30 P. M.

- ADDRESS OF PRESIDENT.....Dr. D. C. Gore, Marshall
- ADDRESS IN MEDICINE.....Dr. W. G. Moore, St. Louis.
- ADDRESS IN SURGERY.....Dr. C. H. Wallace, St. Joseph

**SURGICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

MORNING SESSION, 9 O'CLOCK.

Non-Lithogenous Obstruction of the Biliary Ducts,

A. E. Cordier, Kansas City

Discussion opened by H. G. Mudd, St. Louis.

Lessons to be Drawn from Recent Operations on the Stomach.

W. Bartlett, St. Louis

Discussion opened by A. H. Cordier, Kansas City.

Appendicitis.....C. G. Geiger, St. Joseph

Discussion opened by W. H. Farrar, De Soto.

Why Some Appendectomies are Followed by Prolonged Abdominal Pain.....Francis Reder, St. Louis

Discussion opened by C. M. Barbee, Kansas City.

The Country Doctor and Appendicitis.....M. P. Shy, Knobnoster

Discussion opened by J. J. Norwine, Poplar Bluff.

Surgical Problems in Spinal Trauma.....John C. Morfit, St. Louis

Discussion opened by R. McE. Schaufliker, Kansas City.

Tuberculous Disease of the Joint.....T. E. Potter, St. Joseph

Discussion opened by H. Tuholske, St. Louis

The Importance of Post-Operative Treatment in Diseases of the Rectum.....W. H. Stauffer, St. Louis

Discussion opened by E. H. Thrailkill, Kansas City.

**SURGICAL SECTION.**

THIRD DAY—THURSDAY, MAY 17TH.

AFTERNOON SESSION, 1:30 P. M.

Obstructions of Small Intestines from Chronic Disease, with Report of Cases.....Roland Hill, St. Louis

Discussion opened by Wm. M. West, Monett.

The Relative Value of the Surgical Procedure Employed for the Relief of Paralysis Following Acute Anterior Poliomyelitis,

Nathaniel Allison, St. Louis

Discussion opened by W. C. Overstreet, Sedalia

Surgery of the Liver.....St. Elmo Sanders, Kansas City

Discussion opened by Paul Y. Tupper, St. Louis.

Do We Cure Diffuse General Peritonitis...John Young Brown, St. Louis

Discussion opened by J. N. Jackson, Kansas City.

A Method of Radical Relief of Cases of Deafness Long Abandoned as Hopeless, Illustrated by Report from Actual Practice,

R. Barclay, St. Louis

Discussion opened by Theo. S. Blakesley, Kansas City.

A Method of Operating in Inguinal and Femoral Hernia When Complicated by Abscesses.....Herman E. Pearce, Kansas City

Discussion opened by F. J. Lutz, St. Louis

Ovarian Tumors, and Presentation of Specimen.

J. D. Porterfield, Jr., Cape Girardeau

Discussion opened by F. R. Anthony, Maryville.

Tuberculous Affections of the Rectum...E. H. Thrailkill, Kansas City

Discussion opened by Leon Straus, St. Louis.

Primary Tuberculosis of the Rectum with Report of Cases,

Leon Straus, St. Louis

Discussion opened by C. C. Leeper, Brayner.

The Pathology of Pelvic Inflammation...Thos. J. Beattie, Kansas City

Discussion opened by W. McNabb Miller, Columbia.

## COUNTY SOCIETY NOTES.

## BATES COUNTY MEDICAL SOCIETY.

Bates County Medical Society met in the Circuit Court room at Butler on April 12th. A symposium on diphtheria was a very interesting feature of this meeting. A general discussion of the papers followed and every member present took part. The consensus of opinion was that larger doses of anti-toxin should be administered. A general discussion of the subject of tuberculosis was taken up and great interest was manifested by the members.

The society decided that quarterly meetings were too infrequent to maintain active interest and therefore voted to meet at Butler on May 10th at 2 p. m. After the adjournment, the members were invited to participate in a dinner prepared by the local members.

E. N. CHASTAIN, M. D.  
Reporter.

## CALDWELL COUNTY MEDICAL SOCIETY.

The Caldwell County Medical Society met in regular session at Cowgill, April 4th. Dr. R. K. Dodge, president, in the chair. Present, Drs. Dodge, C. C. Leeper, G. S. Dowell, H. A. Schroeder, B. F. Carr, G. B. Cowley, W. T. Lindley and Tinsley Brown. Dr. G. W. Grove of Kansas City was present as a visitor. The subject of the early recognition of Pulmonary Tuberculosis was presented by Dr. Grove and discussed by the members of the society. Dr. G. B. Cowley read a

paper entitled "Some Uses of Calomel." This was liberally discussed by the members. One new member was admitted.

The next meeting will be held at Kidder, July 11th.

TINSLEY BROWN, M. D.,  
Reporter.

## CAMDEN COUNTY MEDICAL SOCIETY.

The Camden County Medical Society was called to order at the office of the president, Dr. Geo. M. Moore at 7:30 p. m., Tuesday, February 20, 1906. In the absence of the secretary, Dr. G. A. Moulder was made temporary secretary. Dr. E. G. Claiborne, of Decaturville, presented two clinical cases. First case, a boy of about 16 years who for about 15 months had a running sore just above the hip joint of the left leg; also a sore, recently healed, on right thigh just below joint. Not much pain, occasionally slight fever. Diagnosis, tuberculosis. Treatment advised: Thoroughly open up and currete out all dead or diseased bone and put on good constitutional treatment. Second case. A man of about 30 years—married—family history, not good. About six months previously his right knee began to pain him. No effusion in joint at first, but some present now. Just over head of tibia slight tenderness on pressure. Diagnosis, tuberculosis. Treatment, constitutional and, locally, counter irritants, etc.

Dr. Dellabar, of St. Louis, made



a short talk on the treatment of typhoid fever, and malarial complications.

Present: Drs. Sherman Mills, of Macks Creek, J. S. Ford, G. A. Moulder, Geo. M. Moore, W. J. Clark, of Linn Creek, E. G. Claiborne, of Decaturville. Dr. Dellabar, formerly of Stoutland, but at present of St. Louis, was in attendance and gave a lengthy talk on a new method of his own for the treatment of tuberculous diseases. Dr. J. W. Palmer, of Climax Springs, was proposed for membership to be finally passed on at the regular meeting at Macks Creek.

The following paid their dues: Drs. Moore, Moulder, Clark and Ford of Linn Creek, Dr. Mills, Macks Creek, Dr. Claiborne, of Decaturville and Dr J. W. Palmer, of Climax Springs. Adjourned to meet at Macks Creek the second Monday evening of April.

G. A. MOULDER, M. D.

Secretary Pro tem.

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## CARTER-SHANNON COUNTY MEDICAL SOCIETY.

The Carter-Shannon Medical Society held its regular meeting at Winona, Wednesday evening, April 4th. In the unavoidable absence of President Dr. Frank Hyde, Vice-President Dr. T. W. Cotton took the

While all the members of the society were not present, the attendance was fairly good, and the meeting was full of interest.

Among the papers read was one by Dr. Wm. Fulton entitled,

"Broncho-Pneumonia." The paper was an able one, dealt largely with the pathology of the disease, including many other interesting points, one of which was that too much emphasis should not be attached to the drug part of its treatment.

A paper on "Muscular Rheumatism," by Dr. J. A. Chilton was read and discussed, the discussion finally including rheumatism in its other forms, eliciting many important points both regarding the etiology and treatment of the disease.

A paper by Atty. J. W. Chilton on "The Relation of the Medical and Legal Professions" was read, dealing with the more important points where the two great professions come together. The subject was ably handled, and was discussed with a great deal of interest by those who listened to it.

All told the meeting was a very successful and interesting one. The next meeting will be held at Birch-tree.

J. A. CHILTON, M. D.

Reporter.

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## CLINTON COUNTY MEDICAL SOCIETY.

The Clinton County Medical Society met in Plattsburg, April 3rd, with a fair attendance of the members, and was called to order by the president. The minutes of the last meeting were read and approved.

Dr. R. W. Rea reported a case of lupus which had resisted various treatment for fourteen years and under his care healed kindly by

x-ray treatment without any scar formation, notwithstanding poor health of the patient.

The board of censors passed on the application of Dr. J. A. Franklin, of Cameron, and he was voted a member of this society.

A special committee consisting of Drs. R. W. Rea and P. M. Steckman to prepare resolutions representing the position of this society concerning nostrums and shop preparations, made the following report:

"Whereas the Medical Associations, both National and State, are making an effort to bring the formula of all medicines in the market nostrum business before the public for the purpose of educating the people and profession as to the many injurious effects thereof:

"Resolved, That the Clinton County Medical Society recognize that our medical hope is in legislation and that we desire to be on record as being in thorough accord with all legal moves to elevate the profession and denounce as being unethical the glowing endorsements that many physicians are giving the nostrum business." This report was accepted and the committee discharged.

Other members on the program being absent, the society adjourned to meet in Plattsburg, May 1st.

E. A. COLLEY, M. D.  
Secretary.

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### COOPER COUNTY MEDICAL SOCIETY.

The Cooper County Medical Society met in regular monthly session,

April 3, 1906, at the W. O. W. hall, Dr. F. R. Smiley presiding. Members present. Drs. F. R. Smiley, R. L. Evans, W. H. Cooper, A. J. Smith, P. L. Hurt, C. H. Van Ravenswaay, A. E. Monroe, G. A. Russell, W. A. Reynolds and J. R. Lionberger.

There being no papers prepared the society took up the discussion of clinical cases presented by the members. It has been found that this encouraged a freer discussion than a paper would afford.

Clinical cases were reported by the majority of the members present, all taking part in the discussion. The subject of quinine in pneumonia was also brought before the society. None of the members had had any experience in the treatment of pneumonia by giving such enormous doses of quinine as has been suggested by several writers in recent literature.

Dr. H. V. Cordry, physician to the Missouri Training School at Boonville, was found eligible and upon the unanimous vote was elected to membership. The name of Dr. R. E. Fogle, of Clifton City, Cooper County, was presented for members.

There being no further business the society adjourned to meet Tuesday, May 8, 1906.

JOHN R. LIONBERGER, M. D.,  
Secretary.

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### HOLT COUNTY MEDICAL SOCIETY.

The second quarterly meeting of the Holt County Medical Society was held in the parlors of the Glad-

stone hotel, at Mound City, on the 12th inst. All the officers were present and the attendance large, nearly every town in the county being represented.

The scientific part of the program consisted of a paper by Dr. Williams on "A Study of the Eighth Decennial Revision of the U. S. P., with Conclusions," a paper by Dr. Chandler on "Toothache from the Standpoint of a General Practitioner—or as it Concerns the General Practitioner," and a paper by Dr. J. W. Miller entitled "Educate the Laity." The executive committee was instructed to prepare a program for a special meeting and banquet for the members, their wives and their friends, to be held at Big Lake, some time in September or October.

Next meeting to be at Forest City, July 12, 1906.

J. F. CHANDLER, M. D. Reporter.

#### HOWARD COUNTY MEDICAL SOCIETY.

Howard County Medical Society met in Fayette on April 6th, at the office of the secretary, the president, Dr. Bonhan, in the chair. There were present Drs. N. E. Smith, Bonhan, Watts, Lewis and Champion. Minutes of the previous meeting were read and approved. Communications were read from Drs. W. A. Norris, W. E. Williams and E. Lowry. These communications were considered and as a result Howard County Medical Society voted to hold a joint meeting with Cooper and Boone County Medical Societies on May 4th, the time and place of meeting to be decided upon

later. A splendid program will be arranged for this meeting, and Drs. Wright, Burgin and Smith were requested to read papers at that meeting.

The name of Dr. C. F. Drake, of Boonsboro was presented for membership and reported upon favorably by the committee. He was duly elected a member of the society.

C. W. WATTS, M. D.,  
Reporter.

#### JEFFERSON COUNTY MEDICAL SOCIETY.

##### MEETING OF FEBRUARY 27TH.

Jefferson County Medical Society met in regular session at Festus, February 27th. The president, Dr. W. H. Farrar, being absent, the Vice-President, Dr. J. W. Pickel, presided. Dr. J. E. Rutledge acted as secretary in the absence of Dr. H. W. Elders, the regular secretary.

After reading and approval of the minutes of previous meeting the following officers were elected for 1906: President, Dr. J. W. Pickel, Crystal City; vice-president, W. E. Gibson, De Soto; secretary and treasurer, C. G. Harris, Festus; board of censors as it stands, C. G. Harris, one year, H. W. Elders, two years, W. H. Farrar, three years; delegate, A. H. Hamel. Motion was made to make the regular meetings the fourth Tuesday of the month of January, April, July and October which was not passed upon but recommended to be further considered at the following meeting to be held in De Soto, March 27th.

##### MEETING OF MARCH 27TH.

Meeting was called to order by the



president, Dr. J. W. Pickel. Minutes of the previous meeting were read and approved. The report of H. W. Elder, secretary, for year ending March 27, 1906 was read and received. Motion to change regular meetings to fourth Tuesday in January, April, July and October, was carried. Dr. W. H. Farrar was elected as alternate delegate to the State meeting. Dr. W. H. Farrar presented a case with interesting features: amputation lower third of leg (tibia and fibula) in man who through injury to foot has walked for 12 years on peg leg, weight being on knee. The bone being a very thin shell-like structure and large medullary space, there was considerable oozing and drainage had to be kept up for five or six days. Otherwise, the result up to this time (six or seven days) was all that could be hoped for, no infection, no temperature, and patient in every way comfortable.

Dr. A. H. Hamel presented a case of appendicitis. When first seen there was general peritonitis. Belly was opened in the appendiceal region and pus in large quantities evacuated. Counter opening on left side was made from which pus was withdrawn, but not so abundant. Now after 17 days, pus is brought away with daily irrigation of salt solution. Temperature now 99 1-2, pulse 100, condition in every way favorable. The patient, a boy of 17, was a very enthusiastic athlete, and attended roller skating rink daily. Was supposed (though no definite history could be elicited) to have traumatic appendicitis with rupture and general infection of the peri-

toneum.

Adjourned to meet in Festus on the fourth Tuesday in April at 1 o'clock p. m.

C. G. HARRIS, M. D.

Secretary.

#### LIVINGSTON COUNTY MEDICAL SOCIETY.

The Livingston County Medical Society met in regular session in the Circuit Court room in Chillicothe on April 11th at 2 p. m., Dr. L. E. Tracey, presiding.

Two clinical cases were presented by Dr. W. L. White and ably discussed by Dr. Witherspoon and others.

"Treatment of Compound Fractures," was the subject of an excellent paper by Dr. T. C. Witherspoon, of St. Louis; discussion by Drs. Barney, Stevens, Grace, Carver, Gordon, Tracey and others. "Tumors of the Uterus and its Appendages," was ably presented by Dr. H. N. Carver, of Chillicothe. "Pleurisy and Pleuritic Effusions; their Etiology, Pathology, Symptoms and Treatment" by Dr. B. N. Stevens, was the next interesting instructive paper which was well received and highly complimented.

A night session was held in the Henrietta Hotel parlors where we had the pleasure of listening to an excellent paper on "Glaucoma," by Dr. Flavel B. Tiffany, of Kansas City, he illustrating the subject with the stereopticon. At this session papers were also read by Dr. R. H. Cabell on "Elements of Disease," and Dr. J. F. Cherrington on "High Frequency Currents and High Vacuum Tubes."

A vote of thanks was tendered to Drs. Tiffany and Witherspoon for their presence and for the instructive papers and talks, and a cordial invitation was extended to them to meet with us again soon.

J. F. CHERRINGTON, M. D.  
Reporter.

### NEWTON COUNTY MEDICAL SOCIETY.

Newton County Medical Society met at Neosho, April 10th, the president, Dr. R. L. Wills in the chair. Minutes of the last meeting were read and approved.

Puerperal eclampsia was the subject for a general discussion by the members in which all present participated.

Dr. Maas read a paper on muscular rheumatism which was favorably commented upon and discussed at length.

Dr. P. C. Yates read an excellent paper and interesting cases were reported by other members.

A program was arranged for the next meeting which will be held on the second Tuesday in May.

HORACE BOWERS, M. D.  
Secretary.

### NOWADAY COUNTY MEDICAL SOCIETY.

Nowaday County Medical Society met in regular session at Maryville on April 10th. The following members were present: F. R. Anthony, G. A. Nash, L. E. Dean, J. A. Larrabee, M. M. Pollard, A. D. Barnett, E. L. Crowson, C. F. Howell, K. C. Cummins, J. H. Tood, J. W. Dean, A. B. Allen, L. E. Dean; visitor, Dr. Jacob Gieger, of St. Joseph.

Minutes of previous meeting were read and approved. Motion read by Dr. F. R. Anthony to amend Chapter III, section 1 of the by-laws to read as follows: The officers of the society shall be elected at the January meeting of each year, which shall be known as the annual business meeting. The amendment was referred to the table according to the constitution governing the same.

The society proceeded to elect the following officers: President, F. R. Anthony; vice-president, J. W. Dean; secretary, H. L. Saylor; treasurer, J. A. Larrabee; delegate, E. L. Crowson.

The president invited Dr. Jacob Gieger of St. Joseph to address the society, and his remarks upon the benefits of medical societies were listened to with interest.

The scientific program was as follows: Gastric Ulcer, by Dr. W. M. Wallis; Report of Case of Ectopic Pregnancy with Rupture of Sac and Presentation of Specimen.

F. R. ANTHONY, M. D.,  
Secretary.

### PEMISCOT COUNTY MEDICAL SOCIETY.

The regular meeting of Pemiscot County Medical Society convened April 16, at Caruthersville. Meeting called to order at 2:30 p. m. by Dr. J. B. Lutten, president. Dr. P. L. Tipton acted as secretary, Dr. Johnson being absent. Minutes of last meeting were read and approved.

Dr. M. H. Hudgens reported a very interesting case of burn. Discussed by Drs. Conrad and Tipton.

Dues were paid by the following members: Drs. Crowe, Conrad, Martin, Hudgens, Luten, Granger, Tipton and Johnson. Application of Dr. G. A. Granger, of Steele, was presented and in due time accepted. Dr. Conrad volunteered to read a paper at next meeting, which was voted to be held at Steele, on the 8th of May next.

P. L. Tipton, M. D.,  
Secretary Protém.

#### STE. GENEVIEVE COUNTY MEDICAL SOCIETY.

The Ste. Genevieve County Medical Society held its regular monthly meeting on April 11th, 1906, vice-president Hinch in the chair. Members present: Drs. Hinch, Morganstein, Hertich, Jarvis, Lanning and Rutledge. Visitor, Dr. Jas. O'Ready. Minutes of last meeting were read and approved. Dr. Rutledge offered the following resolution:

"Resolved, That hereafter the members of the Ste. Genevieve County Medical Society make no examinations for life insurance companies for less than \$5.00," which was unanimously adopted.

Dr. J. M. Shirley, of St. Mary was elected to membership by a unanimous vote.

No further business appearing, the society adjourned until the 2nd Wednesday in May, 8:30 a. m.

R. W. LANNING, M. D.,  
Secretary

#### ST. LOUIS MEDICAL SOCIETY.

MEETING OF MARCH 24TH, 1906.  
The society met in regular session

at 8 o'clock p. m. in Medical Library Building, 3525 Pine Street, the president, Dr. Geo. Homan in the chair.

After reading of minutes of previous meeting and transaction of regular routine business, the committee on Public Health and Legislation reported that during the past week they had collected \$500 to be used in prosecution of illegal practitioners, also that during the coming week action would be taken against eight midwives.

The scientific program was a symposium on "The Neurological Aspect of Head Injuries." Introductory remarks on the scope and importance of the subject, by F. R. Fry; Indications for Immediate Operation from the Neurological Point of View, by Dr. M. A. Bliss; Relation of Late Epilepsy to Head Injuries, by Dr. S. I. Schwab; Head Injuries and the Problem of Localization, by Dr. W. W. Graves; Head Trauma and Psychoses, especially Dementia Paralytica, by Dr. G. Campbell; Discussion by Drs. Carson, Bartlett, Kirchner, Ehrenfest, Kail, Bles, Green, Fleming and Outen. Attendance 86.

#### MEETING OF MARCH 31ST.

The building committee reported the progress of the new auditorium; while the labor trouble has delayed it to some extent, still it is well under way and the raising of money to pay for same is progressing nicely. The executive committee made their regular monthly report, and outlined the scientific work for the month of April, which should prove very interesting and instructive. The committee on elections rec-



ommends the following named physicians, who were elected to membership: William L. Clapper, 5004 Delmar avenue; H. W. Dickerson, 536 N. Taylor avenue; C. G. W. Jungk, 536 N. Taylor avenue; C. L. Munson, 622 Hickory street; Albert H. Myerdick 536 N. Taylor avenue; Thomas J. Nalley, 351 N. Grand avenue; Jerome D. Potts, Lister Building; Alfred R. Rowe, 536 N. Taylor avenue; Eugene A. Scharff, Frisco building; Jacob J. Singer Female Hospital.

The committee on public health and legislation reported an additional sum of money collected to be used in the prosecution of quacks, and stated that they expected to make the fund \$1,000 within the next two weeks. Charges have been filed by the society's attorney, I. V. Barth against Mary Ann Murphy, 2018 Olive street; Anne Newland, 2321 Olive street; Matilda Meyers, 112 S. 14th street and Dr. A. F. Peeler, 2912 Washington avenue. They have been subpoenaed to appear before the state board of health, April 10th, and show cause why their licenses should not be revoked. Many other cases will soon follow. The right of the state board of health to revoke the license of a physician or midwife, upon conviction of unprofessional conduct, has been sustained in a recent decision by the Missouri supreme court.

Dr. Victor A. Bles read a paper entitled "Gastric Neuroses." Discussion by Drs. Myer, Grindon and Shattinger.

Dr. F. J. Lutz read a paper entitled "A Plea for the Early Establishment of Collateral Circula-

tion in Hepatic Cirrhosis. The doctor illustrated his paper by showing a patient upon whom he had operated a short time ago. While the operation is a comparatively new one, and its value not definitely established, the results have been very encouraging, from 30 to 40 per cent being cured; the idea is, to establish a connection between the portal and systemic circulation and thus relieve the liver. This is done by attaching the omentum to the abdominal wall. Discussion by Drs. Carson, Nicholson, Tuholske, Myer and Grindon.

Average attendance for March 80.

#### MEETING OF APRIL 7TH.

The committee on election reported favorably on the application of Dr. W. E. Klokke, of 1316 Mississippi avenue and he was elected to membership.

Two papers on tuberculosis were read; one by Dr. J. H. Tanquary, "Tubercular Arthritis;" the other by Dr. Wm. Porter, "Some Phenomena of Tuberculosis Infection." These papers were discussed by Drs. Booth, Lemen, Behrens, Kirchner and Fleming.

Dr. Ernest Jonas, read his paper which had been deferred from meeting of March 31st, and presented specimens. Discussion by Dr. Strauss, Stauffer and Deutsch.

Dr. Joseph Grindon reported a case of "Epithelioma Adenoides Cysticum."

Dr. A. C. Snodgras, city health commissioner, one of the most active and valued members of our society, died at the City Hospital, April 6th, after a week's illness, of pneumonia. The doctor was to have read a paper on pneumonia at the coming

meeting of the Missouri State Medical Association. Again we are reminded of that old saying: "Physicians die of the disease which they have studied most." A committee was appointed to arrange for holding memorial services. A number of the members of the society were appointed as honorary pall-bearers. The funeral was held at the Church of the Messiah, Sunday, April 8th at 2 o'clock after which the body was cremated.

#### MEETING OF APRIL 14TH.

There was but one paper read at this meeting. "Classification of the Causative Factors of Railway and Allied Injuries, based upon the Kinesic States assumed by the Injured Individual," by Dr. W. B. Outten. The paper called forth a very interesting discussion.

#### SPECIAL MEETING OF APRIL 15TH.

Exercises in memory of Dr. C. A. Snodgras, were held in the society's hall, 3525 Pine street at 4 o'clock p. m., Dr. Geo. Homan, president of the society presiding. The invocation and benediction were pronounced by Rev. J. W. Day, pastor of the church of the Messiah. Short addresses were delivered by Dr. Geo. Homan, Mayor Rolla Wells, Dr. W. G. Moore, Atty. H. T. Kent, president of the Civic League; Dr. W. J. Miller, president of the Eclectic Medical Society and John H. Matthews. At the close of the addresses a memorial to Dr. Snodgras, prepared by a committee composed of Dr. R. Luedeking, Dr. J. Y. Brown, Dr. O. H. Elbrecht, Dr. W. G. Moore and Dr. L. H. Behrens, was read and adopted.

Another memorial was read by Dr.

F. J. Taussig, on behalf of the Medical Alumni Association, of Washington University, which was also adopted.

I. E. GRAHAM, M. D.,

Reporter.

### ST. LOUIS COUNTY MEDICAL SOCIETY.

The regular meeting for March was held on the 14th at Clayton with President Howard Carter in the chair. The society proceeded to ballot on change of meeting place with the following result: Kirkwood, eight votes, Maplewood one vote. Dr. Wyer, chairman of committee having the matter in charge announced that the meeting place in Kirkwood would be in the Civic Improvement League rooms, corner of Main and Webster.

Dr. Wyer finished reading his paper entitled

#### ACUTE LOBAR PNEUMONIA.

There is no attempt in this paper to give a systematic account of the whole subject, but only certain phases which have particularly interested the writer are discussed under four main heads: (I) What has been added to our knowledge of the etiology of the disease through the studies on the pneumococcus, carried on under the direction of the medical commission for the investigation of Acute Respiratory Diseases of the Department of Health of the City of New York; (II) The irregularity of obscurity of symptoms in children, with reports drawn from a series of personal cases during the present winter; (III) Prognosis, in general and in infants and children;

(IV) Some consideration of treatment.

Some of the most important and striking facts brought out in the investigation of the New York Commission are: (I) During the winter months a large percentage of healthy throats harbor typical pneumococci; there are also a typical strain existing in a larger percentage of healthy persons' throat secretions than of those suffering from pneumonia. (II) By repeated inoculations into sheep the sheep's serum acquires a certain protective power for mice against the homologous strain of pneumococci, and against certain other strains. (The failure of anti-pneumococcus serum is due, at least in a large measure, to the large number of strains of the infecting organism, and the impossibility of ascertaining which variety is causing the toxæmia, and of obtaining sera antagonistic to all the different varieties). (III) Coincident with the production of protective power, a slight specific increase of the sheep's serum in phagocytic power (in vitro) with strains of pneumococci. (IIII) The vitality of the pneumococcus in moist sputum is of considerable duration, being somewhat less than two weeks if the sputum is not exposed to direct sunlight. Under ordinary conditions the bacteria are not given off from the moist sputum, but if it is dried the masses may remain virulent for a long time, and when powdered may be scattered over the floor, walls and bedding. In powdered sputum the bacteria die off rapidly; exposed to sunlight or diffuse daylight they may perish within an hour.

Characteristics of pneumonia in childhood. Onset: Initial chill almost invariably absent in infants, and uncommon in young children. Temperature rises suddenly, often accompanied by vomiting. Convulsions in the early stage, contrary to many text-books, very unusual, Morse, of Boston, in a study of 118 cases in infants finding but a single one. Pain in common but difficult to judge its locality in infants and young children; often appear to be abdominal, and is greatly aggravated by pressure over abdomen. Cough always present, but in early stages often so slight as to be disregarded. Gastro-Intestinal disturbances are exceedingly common. Vomiting at outset, little appetite. Later intestinal distention is often a persistent, most distressing and troublesome symptom; if followed by diarrhœa is of grave significance. (In the writer's series of 11 cases the only fatal case showed marked distinction from the fourth day and was followed by diarrhoea toward the end).

Physicial signs in infants may be very obscure; an early sign is diminution in the respiratory sound over a circumscribed area of the chest, with crepitation on deep breathing. Heightened pitch of expiratory sound is a valuable sign, but hard to detect if child is crying; they, however, the cry seems nearer the ear over the affected area. Unless the back of the chest near the spine, be thoroughly examined, the signs may be overlooked. In infants and young children where no typical signs are found it is most important to watch the character and the *rate*



of respiration.

Reports of illustrated cases followed.

Prognosis at all ages: No more valuable conclusion can be drawn at present than Wells, of Chicago, has presented, finding in a study of over 600,000 cases a mortality of about 20 per cent. In infants, the mortality, according to the studies of Morse, referred to above, is much higher than is generally supposed, being in hospital cases, in the neighborhood of ten per cent. Holt, however, thinks this figure too high.

The fact that pneumonia is a self limited disease, and that from sixty to eighty per cent. at all ages get well without any treatment, has led to a great deal of hasty judgment as to the efficiency of certain lines of treatment. The further fact that mortality has been little if at all reduced in the past 40 years, suggests that no method of treatment heretofore pursued has any direct influence upon the disease; we are accustomed therefore, to "treat the patient, and not the disease." It is the belief of the writer, however that upon a better understanding not only of the etiology, but also of the real nature of pneumonia, advance in methods of treatment will be made. He wishes also to express a conviction that the stimulation of the heart, in these cases, has often been begun too early, especially in children, to the distinct detriment of the patient. The importance of keeping the digestive tract in the best condi-

tion, keeping the bowels open, and fermentative distention combatted, in some cases by calomel, in others by high enemata of plain water, salt solution, or in obstinate cases, of a solution of alum, 1 dram to the quart, must not be overlooked. External applications in the form of clay mixtures are not recommended, especially in infants, on account of the extra work thrown upon the respiratory muscles, in lifting this additional weight.

On theoretical grounds any agent that increases the leucocytes, and their phagocytic power should be of great value; the writer has in all but one of eleven cases from the time a diagnosis could be made, used nuclein in two grain capsules every three to six hours: unfortunately, no blood counts could well be made to watch this action of the drug. In some cases of high and irregular temperature, with great weakness, the innunction of ungt. Crede was of undoubted benefit in reducing the temperature and improving the general condition.

Discussion of the paper was then taken up and interesting remarks made and experiences mentioned by Drs. Guibor, Reynolds, Townsend, Randle, Moore and Carter. Drs. Dumnovant, Brossard and Armstrong were also present.

The next meeting will be held in Kirkwood.

R. D. MOORE, M. D.,  
Reporter.

## BOOK REVIEWS.

A Treatise on Disease of the Anus Rectum, and Pelvic Colon, by James P. Tuttle, A. M., M. D. Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital, Visiting Surgeon to the Almshouse and Workhouse Hospitals. With eight colored plates and three hundred and thirty-eight illustrations in the text. Second edition, revised. New York and London. D. Appleton and Company, 1905.

Three imprints of the work having been exhausted it was thought advisable by the publishers to issue a second edition. Not much advance having been made, a radical revision was not necessary. The sections on Anæsthesia in Rectal Diseases and Dysenteric Proctitis have been entirely rewritten. Numerous practical points from the author's own personal experience have been added. The book has been written during an active practice so that every opinion expressed in the volume has been put to the practical test.

Diseases of the Nervous System, resulting from Accident and Injury. By Pearce Bailey, A. M., M. D. Clinical Lecturer in Neurology, Columbia University, New York City; Consulting Neurologist to the Roosevelt, St. Luke's and Manhattan State Hospitals, etc. New York and London. D. Appleton and Company, 1906.

The revision of the first edition which was printed in 1898 required a recasting of the entire book, therefore the present volume is printed from new plates. In addition to the

scope of the book has been extended so that it should win a place for itself as a treatise on all traumatic affections of the nervous system. This volume is written from the neurologist's standpoint. Those subjects most fully described in text-books on surgery are dismissed with briefest mention. The late effects of brain injuries, receive more notice than the acute. A number of new illustrations have been added and many old ones have been displaced by new. This book is of the greatest interest, not only to the surgeon and neurologist but to the general practitioner's.

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A Treatise on Surgery by George Ryerson Fowler, M. D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic; Surgeon to the Methodist Episcopal Hospital; Surgeon-in-chief to the Brooklyn Hospital; Surgeon to the German Hospital. Containing 888 Text-Illustrations and Four Colored Plates, all Original. Volume 1. Philadelphia and London. W. B. Saunders & Company, 1906.

Of the many recent works on surgery none are more complete and up to date than the work of this writer. The author has brought together the most recent and improved methods of surgical practice arranged in such a manner as to be readily available to both student and practitioner. A departure has been taken from the

arrangement usually followed in the grouping of subjects. The study of inflammation is based on the tissue changes that follow the infliction of wounds. Surgical bacteriology is studied in connection with the etiology of inflammation. The section on Laboratory Aids in Surgical Diagnosis and Prognosis with special reference to hematology, urinology, etc., is of special interest. The anatomic method has been used describing the injuries and diseases in each region successively. The book is well illustrated and unique in this that every illustration is original. A work such as this will be greatly appreciated by the profession.

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The Medical Diseases of Infancy and Childhood. With Points on the Anatomy Physiology, and Hygiene Peculiar to the Developing Period; by Alfred Cleveland Cotton, A. M., M. D. Professor of Pædiatrics Rush Medical College, University of Chicago; Attending Physician for Diseases of Children Presbyterian Hospital; Consultant to the Central Free Dispensary, etc., etc. Formerly Physician-in-charge of the Chicago Isolation Hospital and of the Infectious Disease Wards of the County Hospital. Member of the Twelfth International Medical Congress, Moscow. Honorary Member of the Societe d'Hygiene, Paris, etc. Philadelphia and London. J. B. Lippincott Company, 1906. \$3.50.

This volume affords the fundamental principles for the study of clinical pædiatrics and much space is given to the anatomy and physiol-

ogy with reference to the developing period. This work is concise and wholly confined to the practical phase of the subject. The deductions are largely drawn from the author's personal experiences. The vital subject of Infant Feeding is thoroughly discussed in the hope of stimulating a genuine interest rather than a blind following of dogmatic formulæ. The work is well illustrated. This volume is a valuable addition to the subject of pædiatrics

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The Examination of the Function of the Intestines, by means of The Test-Diet. Its Application in Medical Practice and its Diagnosis and Therapeutic Value; by Prof. Dr. Adolf Schmidt, Physician-in-chief of the City Hospital, Friedrichstadt in Dresden. Authorized Translation from the Latest German Edition, by Charles D. Aaron, M. D., Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Clinical Professor of Gastro-Enterology in the Detroit College of Medicine; Consulting Gastro-Enterologist to Harper Hospital, Etc. Philadelphia. F. A. Davis Company, 1906.

This book owes its origin to a series of lectures delivered in 1903 being the result of eight years of investigation and observation. The desire to obtain an examination for the function of the intestines that could be carried into practice to advance the diagnosis and therapeutics of the diffuse intestinal disease is the prime object of the author. This little volume will be of great service to the practitioner.



# JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

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## ORIGINAL ARTICLES

### A CASE OF THIRST.

BY W. J. MCGEE, LL. D., ST. LOUIS.

A typical aguaje (i. e., "water") of southwestern Arizona has been known since the days of Padre Kino (who apparently passed that way in the expedition of 1701 which proved that California is not an island) as Tinajas Altas or "high tanks" certainly the place was first located for white men on the Kino map of 1702 as Tinaxa. The water is found in a number of potholes or water-pockets in a gorge deeply cleaving the north-eastern side of Sierra Gila; it is chiefly a residuum of the light mid-summer or midwinter rains, though the deeper basins are partly supplied by seepage from the granite ledges and precipices rising in rugged masses on both sides of the gorge. The locality is about 75 miles south-east of Yuma, some 40 miles south of Gila River, and three or four miles north of the Mexican boundary at a point 50 miles east of the mouth of Rio Colorado. The nearest house—the Southern Pacific station at Well-ton—is some 30 miles northward in an air line over broad sandwastes with scattered buttes and ranges;

water is obtainable at the Fortuna mine, 35 miles northwestward in Sierra Gila, and sometimes in other waterholes in the granites seven miles southward and twenty miles eastward; the abandoned Tule Well is 23 miles eastward; and the nearest certain water in that direction is in Rio Sonoyta at Agua Salada, some 80 miles away. The region was never permanently inhabited by the aborigines, though temporarily occupied by the Papago Indians at the times of the cactus-fruit harvests, and apparently by the Cocopa and Maricopa Indians as a way-station on a severe and secret route of intercommunication; and hundreds of mortars are ground into the granites about the tinajas, while other relics occur. For the two half-centuries (1750-1848) during which California was a flourishing Mexican province, Tinajas Altas was reputed the sole sure "water" between Rio Sonoyta at Quitobaquito and Rio Colorado at Yuma on that desperately hard trail known as El Camino del Diablo,

\*Read before the St. Louis Medical Society, February 17, 1906.

joining the royal roads of Sonora and more southerly states with El Camino Real, along which the old missions of southern California were strung; during the days of the Argonauts, from '49 to the middle '50s, the same route was the hardest part of the old Yuma Trail trod by American Pioneers on their way to the land of gold. From the single-house settlement of Quitobaquito to the town of Yuma the trail is houseless, and apparently never had a permanent habitation save a small adobe at Tule Well; yet the passage of pioneers over the desert wastes of the trail was so steady and long-continued that hardly a mile of the 200 from Santo Domingo to Yuma remains unmarked by one or more cruciform stone-heaps, each telling its tale of death by the wayside; death commonly in its cruelest form—by the torture of thirst. Most of the movement was westward, and the worst stretch lay between Tule Well and Tinajas Altas; along this way the cross-shapen stone heaps, each telling mutely of ghastly tragedy, thicken until within gunshot of the nearly perennial water there are over 60 marked graves—and how many unmarked none know; for again and again exhausted strugglers fell at the foot of the gentler slope or failed to find water in the lowest tank and were unable to climb the rocks to the higher reservoirs; when if the next followers were pious folk—as were most of the Mexican pioneers—the stark bodies were laid in shallow graves, laboriously sealed with the sign of the cross.

Such was the site of my camp

from May 20 to August 28, 1905,—a tentless camp, with a living population of one when Papago Jose was gone for a week or less at a time, of two when either he or the young historian Harrison Ford was present, and three with both; or of half a dozen for a few hours at a time when, as happened twice or thrice, prospecting parties passed that way: a camp devoted to meteorologic observation and study of the effects of light on desert life.

Just before noon Monday, August 14, Pablo Valencia and Jesus Rios drifted into camp horseback enroute to the "lost mines" rediscovered by the former some months before. They were supplied with pinole (parched wheat meal) bread, cheese, sugar, coffee, and tobacco for a week's subsistence, and with two 2-gallon and two 1-gallon canteens, and had also a dozen pounds of pressed alfalfa and twice as much rolled barley for the horses.\* Jesus is 65, a former vaquero and nearly typical Mexican, claiming familiarity with the country, but erratic and inconsequent and little dependable in statements of fact or in any other way; he rode his own grass-fed horse which would eat but little barley. Pablo is about 40, of remarkably fine

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\*They were outfitted at Yuma by Jim Tucker, a miner and rancher; they left there in the saddle after noon on August 12, having shipped a bale of hay and a bag of barley with some of their food and canteens to Wellton; camping on the banks of the Gila north of Blaisdell, they started early Sunday morning and reached Wellton about mid afternoon, where they took their freight and fed and watered freely, leaving part of the food for the return. They started for Tinajas Atlas Monday morning "at the time of the morning star" (say three o'clock) and covered the thirty-odd miles in little over eight hours.

and vigorous physique—indeed, one of the best-built Mexicans known to me. In earlier life he was a sailor on Pacific vessels and afterward a wandering prospector and miner, and was tiding over the summer of 1905 by growing watermelons on a ranchita near Gila City. He measures about 5 feet 7 inches, weighs normally about 155 pounds, and is notably deep-chested and round-bodied, with—for a Mexican—exceptionally robust limbs; he is reputed a large eater and heavy sleeper, and is of phlegmatic disposition, given to drowsing in the shade rather than working in the sun—yet when fully started he is vigorous and pertinacious, walking (bare-foot or in sandals) in preference to riding, and moving with a quick and strong upspringing gait enabling him to pass on the road all but the best horses. In a word, he is a particularly fine type of the animal genus *Homo*—a most matter-of-fact man of action in his little world, albeit lightly burdened with acute sensibility, imagination, or other mentality: indeed, an ideal man to endure stressful experience. Between periods of repose he awakens into an energetic habit, openly scorning hunger and thirst, and expressing implicit confidence in his ability to withstand far beyond ordinary men these habitual inconveniences of the range. He rode Jim Tucker's best horse—an animal of exceptional bottom, well inured to desert work.

While their horses ate, Pablo and Jesus lunched with Jose and me, feasting on jerked *cimarron* (mountain-sheep meat) in addition to their

own comestibles. Against my advice (which was to leave at 1 a. m. Tuesday, the moon being about the full) they set out for their El Dorado about five o'clock; but in half an hour they returned, having decided to wait until morning on the ostensible ground that the horses had drank but little, though in reality because my judgment had finally worked in. Next morning Jose stirred up Jesus, and the two pulled Pablo from his saddle-blanket for breakfast; and they got off just before daylight. This was the real beginning of the journey—about 3:45 Tuesday morning, August 15.

Soon after midnight Jesus came in alone, with both horses, reporting that Pablo had sent him back from a point about 35 miles southward to re-water, he himself going forward on foot with a 2-gallon canteen and a stock of pinole, with the agreement—an utterly foolish one in desert life—to rendezvous thirty hours later not on the trail but on the farther side of a nearby sierra. Jesus drank, ate, watered, fed, and struck the trail again (with five gallons of water) about 3:30 a. m. on the 16th. The next morning about 7 he again came in alone with both horses, reporting that his own animal had broken down after a short distance and that he had ridden the Tucker horse by a better route both to the rendezvous and to where he had left Pablo at the edge of the sand hills; and that he had been unable to find either the lost man or his trail. He explained that Pablo had probably gone on to Agua Salada (as he had advised all along, misstating the distance, etc.) and



proposed after resting to return to Wellton and Yuma. He was indeed exhausted, having ridden perhaps 150 miles in about 52 consecutive hours; and his horse was practically broken down and the Tucker animal tired. On putting together all statements from both Pablo and Jesus, I was unable to form a judgment as to whether or not Pablo had gone forward to Rio Sonoyta, though this seemed probable; yet I decided to give him another chance for his life, and so compelled Jesus to rest over a day at Tinajas Altas, and meantime sent Jose (an expert trailer among his tribe of trailers) out on the Tucker horse to find Pablo's trail, giving him full instructions as to routes, smoke signals, etc., (for I knew the region better than he) and directing him to go to the limit of his horse's endurance and then to his own limit beyond. Jose carried a feed of barley, a couple of pounds of pinole and dates, and two extra canteens; he got off about ten o'clock Thursday, August 17. Stopping only to send up smokes at intervals, he followed old Jesus' ill-chosen trails and easily located the point at which Pablo left him on the 15th; thence he followed the foot-trail with difficulty in the darkness of the early night; reaching the sandhills about moonrise, he left the horse and labored through the almost impassable sands seven miles further—then returned as he came, making signal fires here and there. Reaching the horse in the dawn, he arrived at camp just before noon Friday, the 18th. I was convinced that further effort would be bootless, since even if Pablo had not gone on to Agua Sala-

da en route to Agua Dulce and Santo Domingo, as seemed probable, he could hardly still survive—for he had already been out over three days with only one day's water, and two-thirds or three-quarters of those who die from desert thirst expire in less time; so although Jesus and his horse were still unrestored and the Tucker animal had been moving almost steadily for 80 hours and over 225 miles I hurried Jesus off toward Wellton and Yuma to report his virtual abandonment of the man he had undertaken to guide and protect—supplementing his prospective oral report with a special delivery letter to El Padron (Jim Tucker), to be mailed at Wellton in time for the two o'clock train Saturday morning.\*

So ended the first episode in the Pablo Valencia event, in the afternoon of August 18. I remained uneasy a day or two longer, and next day and the day after climbed a neighboring peak 750 feet high, and walked out a few miles on the trail to seek for sign; then Jose and I fell into normal camp routine.

In the graying dawn of Wednesday, August 23, the grasp of sleep relaxed in a vivid dream recalling a picture often presented in the ganaderos (half-wild cattle ranges)

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\*Jesus started about four o'clock on August 18 and should have reached Wellton between one and two, thus getting the letter into Tucker's hands early the next morning, and he should himself have arrived in Yuma early Sunday morning, August 20; but he slumped characteristically on the Wellton stretch and made a needless camp beyond, so that he and the letter arrived about the same time on Monday afternoon.

of western Sonora—the picture of an orderly file of stock led by a stalwart bull and trailing down to yearlings in the rear, the leader iterating his deep grumbling roar of assurance to his herd, which at last—as on the range—rose in quick crescendo into the ear-piercing bellow of challenge and defiance to all other kine. I awoke at the dream-sound to realize its actuality, and turned my head half expecting to see the herd; instead, there stood Jose, just arisen from his blanket, looking down the arroyo. Seeing my movement, he asked, “What is it? I thought it was one of them, lions, roaring like in the Zoo.” Now fully awake, I replied, “It must be Pablo; take the canteen.” Though wholly incredulous, he mechanically siezed a canteen and a strip of manta which with his coat made a pillow, and after a call in reply, ran down the trail. I soon followed, carrying another canteen and a medicine case; and on the arroyo sands, under an ironwood tree at the foot of the little Mesa de los Muertos with its two-score cross-marked graves, came on the wreck of Pablo, with Jose already ministering unto him.

Pablo was stark naked; his formerly full-muscled legs and arms were shrunken and scrawny; his ribs ridged out like those of a starveling horse; his habitually bulging abdomen was drawn in almost against his vertebral column; his lips had disappeared as if amputated, leaving edges of blackened tissue; his teeth and gums projected like those of a skinned animal, but the flesh was black and dry as a hank of jerky; his nose was withered and shrunken to

half its length, the nostril lining showing black; his eyes were set in a winkless stare, with surrounding skin so contracted as to expose the conjunctiva, itself black as the gums; his face was dark as a negro, and his skin generally turned a ghastly purplish yet pallid gray, with great livid or blackish blotches and streaks; his lower legs and feet, with forearms and hands, were scarred and scratched by contact with thorns and sharp rocks, yet even the freshest cuts were as so many scratches in dry leather, without trace of blood or serum; his joints and bones stood out like those of a wasted sickling, though the skin clung to them in a way suggesting shrunken rawhide used in repairing a broken well; from inspection and handling, I estimated his weight at 115 to 120 pounds. We soon found him deaf to all but loud sounds, and so blind as to distinguish nothing save light and dark. The mucous membrane lining mouth and throat was shriveled, cracked and nearly black, and his tongue shrunken to a mere bunch of blackened integument. His respiration was slow, spasmodic, and accompanied by a guttural roaring—the sound that had awakened us a quarter-mile away. His extremities were cold as the surrounding air; no pulsation could be detected at wrist, and there was apparently little if any circulation beyond the knees and elbows; the heartbeat was slow, irregular, fluttering, and almost ceasing in the longer intervals between the stertorous breathings.

The victim was, of course, unable to articulate or to swallow. Water

was poured over his face, into his mouth, and over his abdomen, and rubbed into his body and extremities, the skin first shedding and then absorbing it greedily as a dry sponge; dilute whiskey was forced into his mouth and rubbed on his chest with immediate effect (doubtless the greater because Pablo was a habitual teetotaler); and when in half an hour swallowing motions began feebly, both whiskey and a powerful heart stimulant (digitalis-nitroglycerine-belladonna tablet triturates) were administered internally. In an hour he drank, though most of the water was immediately expelled from the stomach; in two hours he began to partake of food—a bird fricassee with rice and shredded bacon; in some three hours (soon after sunrise) he was able with some help to walk into camp. By this time he had ingested and retained about 2½ ounces of whiskey with 5 ounces of water and 2 or 3 ounces of food; his external tissues were saturated and softened, circulation was restored sluggishly in his extremities, and his numerous wounds began to inflame or exude blood and serum. Articulation slowly returned, and in a cracked voice, breaking involuntarily from bass to falsetto, he began to beg pathetically for “Agua, agua” and to protest against the “dust” which we were compelling him to sip; he even failed to recognize coffee, which was given in small quantities.

As Pablo's strength returned in the course of the day, two abnormal conditions developed: The more disturbing at the outset began with local inflammation about the

cuts, scratches and bruises suffered in creeping the last seven miles over a cactus-dotted and often stony plain, and extended into a general feverish and irritable state doubtless intensified by the long-continued nerve-strain; the other was the passing of the hoarse, stertorous breathing into a sort of spasm apparently affecting stomach, diaphragm, intercostal muscles, and the upper part of the body generally—a sort of combined retching and hiccupping so severe as to rack the victim from head to foot and induce violent vomiting. A preparation of bismuth in tablets gave some relief, and pepsin-pancreatin tablets taken with food were beneficial; yet the spasms were so severe and persistent as to threaten fatal exhaustion. Toward evening urinary excretion began feebly, at first accompanied by blood and mucus; it was over two days before movement of the bowel began. On the third day (saturday, August 26) vision and audition became normal, and Pablo began to notice things in a strange infantile way, as if a power of apperception stirred; he stared at and evidently recognized shrubs and rocks about the camp, scrutinized and curiously felt of his hands and feet, and also began to recognize water; while his mind began to place Jose and me in his fabric of definite cognition—for we had been mere shadow objects before. He surprisedly examined his wounds, which were then healing satisfactorily, and described the spasmodic retching as due to the forming of a “ball” in his stomach. On the second day he had muttered, half to himself, the events of his



journey; on the third, he described them spontaneously and in reply to inquiries in such manner as to yield a definite and doubtless fairly trustworthy itinerary.

On Sunday, August 27, came Jim Tucker with four-horse wagon and extra saddle-animals accompanied by two or three men to search for trails and remains: at first Pablo hardly knew them and shrank from them as creatures of a nightmare; but they showered him with attentions and forced on him heaping plates of stews, frijoles, and fried bacon, with whole loaves of soggy Dutch-oven bread, with the result that the spasms were intensified and accompanied by effusions of biliary matter streaked with blood. For a day Tucker planned going on to the "lost mine", leaving Pablo with me; but the relapse was so serious and the recurrent spasms so severe that by Monday noon I felt compelled to prescribe a return to Wellton. About sunset the spasm-racked wreck was made comfortable in the wagon: about eleven, when a halt was made to rest the team—for the nearly trackless sands dragged heavily—I judged there was an equal chance of getting the patient alive to Wellton. At two we were up, and about seven we drew into the clean sand wash in the rear of the station. Twenty minutes later we had some raw eggs, and Pablo's crisis was past. Later in the day watermelons were secured; and next morning we were in Yuma. Pablo was guarded for a few hours, but spent practically the whole of August 31 deliberately and methodically devouring watermelons, with occasional lapses into

slumber; and in a week he was well and cheerful, weighing 135 pounds or more—though his stiff and bristly hair, which had hardly a streak of gray a fortnight before, had lost half its mass and turned iron-gray.

Pablo's itinerary, taken partly from his nearly meaningless maundering as speech returned but chiefly from connected statements largely in reply to inquiries, runs thus:

Tuesday, August 15: Left Tinajas

Altas at 3:45, horseback, with Jesus; rode some 35 miles, reaching "sand hills" about one o'clock; thence went on afoot with 2-gallon canteen (full at starting), pinole, tobacco, serape, duck coat, prospector's hammer, canvas specimen bag, cigarette papers and matches, faring some ten miles through the sands before stopping to sleep. Drank three or four times and took pinole twice.

Wednesday, August 16: Starting with the rise of the morning star, he reached the ledge of which he was in quest about mid-forenoon, and collected specimens, erected monuments, and posted notices for his claim, finishing this work before midday. He ate a little pinole and drank sparingly (as he had done before starting) for the canteen was nearly empty. Starting northward, he began search for a road described (falsely) by Jesus, and straggled rather aimlessly over the sands, moistening his mouth occasionally but not swallowing water, until the canteen was empty; at nightfall he reached an arroyo in which he fancied signs of water. In the

darkness of the early night (before moonrise) he abandoned his nuggets and soon after threw away his stock of pinole and his coat and serape. Failing to find water, he sought sleep in the sands; and when awakened by mouth-dryness obtained some relief—after the fashion of all Mexicans and most Americans in like cases—by occasionally filling his mouth and gargling his throat with urine.

Thursday, August 17: He set out early with little regard for direction, seeking trails and tinajas, but working northward; unable to withstand the heat of midday, he lay down in an arroyo and ate calabasitas (wild gourds of intense bitterness) which his stomach rejected. Arising as the sun declined, he threw away shoes and trousers (with money, knife and tobacco in the pockets) and wandered on northward, finding occasionally old trails which either faded away in a few miles or else led into sands or impassable rocks—trails which were mostly figments of disordered fancy. One led to an immense tinaja; but it was dry. During the day he had frequent recourse to urine, though he nearly lost the power to swallow; during the night he saved every drop of the excretion in the canteen, which he still carried.

Friday, August 18: In early morning he walked a few miles but was overcome by the torrid heat and crept under the shade of a paloverde overhanging the bank of an arroyo; toward evening he arose

and chewed paloverde twigs with little effect save to irritate his mouth and throat. Setting out northward before sunset he found a mescal (a variety of agave) and chewed the stipes, extracting a little moisture; at sunset he caught a few flies and spiders, which he chewed and tried to swallow. Still he wandered northwardly, having in mind first the rendezvous with Jesus, then the old Yuma Trail he had traversed years before. Toward morning he became convinced that Jesus had deliberately misled and abandoned him with murderous intent and the plan of thus securing his El Dorado; and his wrath spurred him on with the aim of knifing his deceiver—a potent incentive which carried him miles and doubtless saved his life. He continued to relieve mouth-thirst with urine.

Saturday, August 19: In early morning he found mule-wagon tracks and recognized the Old Yuma Trail (apparently he was just west of Tule Playa and east of a sand hill—malpais ridge—i. e. about 27 miles east of Tule Well. He struck the trail, but soon fell under the heat and lay all day in an arroyo. In the afternoon he saw one of the large light-green scorpions of the region; it looked so luscious to him that he captured it, ground off its sting with a stone, and devoured it. As before, he used urine, swallowing part. Toward evening he resumed journeying northward, often falling; toward morning he found (or thought he found) Jesus' trail where he had wandered in search

of the hopeless rendezvous set for the 16th. During all of Saturday and throughout this night on the trail he was buoyed up by a new incentive—the hope of reaching Tule Well and casting himself into the moist mud at its bottom, and at the worst dying in the dampness and coolness 37 feet below ground; he knew the notion was half-insane and the hope wholly hopeless, yet unto them he clung as to an inspiration. Meantime, he constantly sought insects to chew, and continued using his urine, now “mucho malo” (very bad.)

Sunday, August 20: In early morning he pushed on westward, often sitting down, sometimes falling, and tried crawling—with little success. His vision was vague; the mountains danced, and the cactus and chapparal clumps moved to and fro before his eyes; and he passed the first Tule Well guidepost unseen (Tule Well is a mile or two north of the main line of the trail) in early morning, and kept on westward to the second one, west of the well—where the sun was growing strong, and he was too weak to work back along the trail. Regarding his passing of the well as an omen of speedy relief, he hung his hat on the guidepost and after creeping to one or two tinajas—known to him of old—which he found dry, he lay all day in the shade of the rocks, utilizing every drop of urine, which now dripped scantily and involuntarily. Toward evening he again bethought himself of Jesus and the pleasure of knif-

ing him, and was inspired to further effort; but he fell so often as he struggled forward that he was only at a remembered camp-site  $3\frac{1}{2}$  miles west of Tule Well when day broke again.

Monday, August 21: On reaching at dawn the camp-site only 19 miles from Tinajas Altas, he felt sure of relief and stretched himself across the trail so as not to be missed by rescuers—there he dozed and slept, starting up frequently at fancied sounds of wheels and hoofs. The sleep and coolness (only 91 degrees) of the day and the short distance traversed the night before had their effect; and toward sunset he set out again westward along the trail buoyed by the certainty of at least finding full canteens (of which Jesus had indeed left two at impossible places). The course was down grade, along the arroyo and across the black malpais mesita on which the ancient graves lie thick; and his hope was strong, though the mountains were no longer seen in their places and he had to feel the trail every few yards to be sure he went aright. He often thought he saw Tinajas Altas with abundant water and food just before him, yet was not wholly cast down on feeling a landmark he knew to be miles away; so he made, with many rests and some naps, 12 miles.

Tuesday, August 22: In early dawn his mind was reaching out buoyantly to Tinajas Altas as but a few steps away, when he half-saw and then fully felt over the six-mile guidepost (about seven



miles from camp), and awoke to the crushing certainty that no canteen hung there, and the still more overwhelming realization that he never could cover the remaining miles of sand—for his urine had ceased to flow hours before, and he felt his last recourse gone.\* As the sun rose he sought the shade of a shrub and there knelt in final prayer for the dying; then he laid himself down with feet and face to the eastward, made the sign of the cross, and composed himself for the end. There—and this was his clearest concept, unreal though it be—with the rising of the sun he died, and his body lay lifeless under the burning rays, though his

innermost self hovered about, loth to leave the material husk. The sun swung across the shimmering vault, and darkness fell; in the chill of evening (fortunately an exceptionally cool night—just above 82°) some vague shadow external to his Ego stirred and then struggled aimlessly against chapparal and cactus along the most trying stretch of El Camino del Diablo. Sometimes he felt

\*Pablo thought he left at the six-mile guidepost his hat and underclothes, though they were not found on subsequent search; and it is more probable they were left at the western Tule Well guidepost. His trail here showed that he seldom walked, and then but for a few steps only to fall again, and mostly crept wanderingly amid the thorny clumps, though sticking fairly well to the trail.

### TEMPERATURE AND MOISTURE.

Dates	TEMPERATURE							MOISTURE			
	Self Registering Therm's				Psychrometer			Humidity		Rain (in.)	Cloud-ness (tenths of sky)
	Max-imum	Minim.	Range	Mean	Dry Bulb	Wet Bulb	Depres-sion.	Dew-Point	Rela-tive Humi-dity		
Aug. 14, 8 pm	99°1	85°1	14°0	92°1	91°0	65°0	26°0	48°0	23.0%	0	0.1—
15, 8 am	91.8	78.8	13	85.3	90.5	62.5	28	41	18	0	.1—
8 pm	98.9	90.9	8	94.9	92	66.5	25.5	51	25	0	.1—
16, 8 am	92	81	11	86.5	86	69	17	60	42	0	.2
8 pm	99.5	85	14.5	92.2	91.5	71.5	20	61.5	38	0	.1—
17, 8 am	94	79.7	14.3	86.8	93	68	25	54	26.5	0	.1—
8 pm	103.2	93.2	10	98.2	95	69	26	54	25.5	0	.1—
18, 8 am	95	83	12	89	87	76	11	72	60.5	0	.1—
8 pm	96	86.6	9.4	91.3	88.5	73	15.5	66	48	0	.8
19, 8 am	88.5	80.5	8	84.5	87	74	13	69	54.5	0	.1
8 pm	98.4	85.4	13	91.9	90	73	17	65	44	0	.0
20, 8 am	90	81	9	85.5	87.5	73	14.5	66.5	50	0	.1—
8 pm	99.1	87.3	11.8	93.2	89	71.5	17.5	63	42.5	0	.1
21, 8 am	89.9	78.4	11.5	84.2	88	74	14	68	52	0	.6
8 pm	91	87	4	89	90	71	19	62	39	0	.6
22, 8 am	92.1	81	11.1	86.7	91	69	22	57	32.5	0	.2
8 pm	100	90	10	95	91	71	20	61	37.5	0	.7
23, 8 am	91.8	82.1	9.7	86.9	91	69	22	57	32.5	0	.2
Means	95	84.2	10.8	89.6	89.9	70.3	19.6	59.8	38.4	0	.2
Averages Aug. 1-28	101.8	81.7	20.1	91.7	92.3	69.7	22.6	56	32.9	.004	.12
May 21-Aug. 28	99.3	77	22.3	88.2	88.9	64.5	24.4	46.5	27.1	.0012	.067

half-alive and wrung by agony of severing spirit and body; oftener he felt that the naked body was pushed and dragged and belabored and tortured by something outside; he knew its voice tried to cry out in protest or call for rescue, but did not feel the voice his own. So the night dragged on, until at early dawn the vague consciousness knew itself near the camp with the certainty of relief, and was dimly surprised at a belating break in the final call.

Wednesday, August 23: It was this last call that fully wakened Jose and me; after uttering it Pablo apparently crept some 50 yards down the last descent to the arroyo below the Mesa of the Forty Graves. Of this day, with break, Pablo remembered nothing its physical shock and psychical clearly.

Summarily: Pablo was in the desert just eight days (and nights), with one day's water; he rode in the saddle 35 miles and walked or crept between 100 and 150 miles. For nearly seven days, or fully 160 consecutive hours, he was wholly without water from sources exterior to his system, save the few drops extracted from the scorpion, agave stipes, and insect—a desert record without parallel known to me; for half the victims of desert thirst die within 36 hours of deprivation, three-quarters within 48 or 50 hours, and nearly all known to survivors within 72 to 80 hours (three days and nights), or hardly half of Pablo's stress. For five days he consumed his urine; ordinarily the re-conversion of excreted liquid is

hardly helpful if not wholly harmful, yet in Pablo's case it seems to have materially prolonged vitality. For nearly nine days (August 17-26) his bowels were inactive, and for two days his kidneys failed to function. The eight-day siege lost him 35 or 40 pounds (or 25 per cent.) of his weight, chiefly through evaporation from skin and membrane; he also suffered fully two-score cuts, scratches and bruises, each of sufficient severity to give some shock to the system; and his mouth, esophagus, and stomach were seriously deranged by his desperate efforts to relieve the thirst-torture. The most striking feature of the case was the absence of wholly insane delirium; he was, indeed, affected by the revulsion against gold as shown by the abandonment of his nuggets and the casting away of his money; he was possessed by delusions as to the wetness of sands and the moisture of articulates and shrubs; he was obsessed by the desire for vengeance against Jesus, the dream of casting himself in Tule Well, and the delusion of death—yet he never lost his trail-sense, and apparently squandered little vitality in those aimless movements that commonly hasten and harden the end of the thirst-victim.

The nature of the case and the severity of the stress successfully encountered by Pablo Valencia cannot fully be understood without considering the utterly desert character of the region and the torridity of the season. The 100-day record of temperature and humidity at Tinajas Altas served to define a vapor-zone about Gulf of California in

which a large part of our summer storm-centers find origin; and although most of Pablo's route lay outside this zone and in a hotter and drier belt, the record from the evening of August 14 to the morning of August 23 approximately indicates the attendant climatal conditions. This record is appended, with the means for the 9-day period, and also the averages for both the August 1-28 and the 100-day periods. From this record it appears that Pablo was favored by exceptionally low temperature and high humidity; yet the maximum temperatures ranged from 88.5 to 103.2 (averaging 95), and the minimum night temperatures from 78.4 to 93.2 (averaging 84.2), i. e., were always above the somewhat variable yet most important physiologic value, which may be termed the *perspiration-point*: the value at which the burden of elimination is transferred either from kidneys and lymphatics to the skin, or from the epidermal to the internal eliminative structures, as the point is passed. Pablo was also exceptionally favored by clouds; for although the sky was never wholly overcast, the morning and evening average of cloudiness reached two-tenths of the total sky. He was fortunate, too, in the high relative humidity for a desert range; at Tinajas Altas the percentage of aqueous vapor ranged from 18 to over 60 (averaging 38), indicating that along his route it probably oscillated between 15 and 55.

#### DISCUSSION.

Dr. Funkhouser:—We know that in the accounts of the ancients, some of which refer to thirst, these suf-

ferers sometimes drank horse's urine. Did not the taking of the urine in reality complicate the trouble instead of relieving it?

Doctor McGee:—In most cases of which I have known the ingestion of urine seemed only to intensify the sufferings, and before observing Pablo's case I was of opinion that the recourse was always injurious rather than beneficial; yet in his case I feel fairly satisfied that the use of urine prolonged his endurance and so saved his life. From the evidence of this case and certain other data on which it throws light, I now incline to think that in general the use of urine may be beneficial to persons well-inured to desert conditions but would be injurious to the uninured.

Dr. F. A. Glasgow:—Is there not a plant containing water which is found in the desert?

Dr. McGee:—Yes, there is a plant commonly known to Mexicans as the *bisnaga* and sometimes to Americans as the "niggerhead" which contains pure water, but Pablo was not acquainted with its virtues and made no effort to use it.

Dr. Ehrenfest:—Are convulsions in these last stages of thirst common? As this patient got a typical uremia, the question is might he not have had uremic convulsions?

Dr. McGee:—You will understand that I do not speak as a medical man but as a layman who has picked up more or less information of a medical character. Convulsive movements, including retching and spasmodic breathing, are not at all uncommon in extreme thirst, though ordinarily the patient passes into delirium or insanity so pronounced



that the convulsions are less notable manifestations. Whether these convulsions are of uremic origin, I am hardly prepared to say.

Dr. Barclay:—Do those who habitually practice total abstinence from alcohol stand such a strain better than alcoholic drinkers?

Dr. McGee:—Yes, that is the opinion of medical men throughout the arid regions.

The President:—What are the phenomena of thirst observed in animals that die of thirst in the desert? Do they have these attacks of delirium or convulsions?

Dr. McGee:—I have never known of convulsions or recognizable delirium in thirsty animals; but it is to be remembered that when animals die of thirst their owners, if with them, are under such stress that they seldom note their precise condition. Horses outlive all but well-inured men when both are alike deprived of water apparently because their bodies (including body-water) are of greater cubical content in proportion to surface, so that evaporation is less effective, and also because their skins and other tissues are harder; but even well-inured men are commonly delirious before the horses succumb.

Dr. Barclay:—Those familiar with the training of athletes know that dietary methods differ widely. One method requires the sparing use of drinking water and other fluids while training. I recall one pugilist's statement, that by the time he went into a prize fight, he was "so dry he could not spit." I have known this man to spar for hours consecutively without fatigue

and without perspiring enough to moisten a blotter. It is the method of many athletes not to soak themselves with water during the period of training. To relieve thirst, they carry a pebble in the mouth. I would like to know whether the method of habitually drinking large quantities of water just before crossing the arid zone, does not aggravate matters later.

Dr. Frank Glasgow:—The runners of Peru were accustomed to chew the leaves of the cocoa and in that way got a certain amount of cocaine. It has occurred to me that perhaps that overcame a certain difficulty in these cases of thirst, it prevented the evaporation from the mucous membranes, and perhaps the value of the leaves lay in that as much as in the increased power of resistance.

Dr. Warren B. Outten:—One of the most interesting points in Prof. McGee's paper is the manner of the oncoming death in persons who die from "thirst;" that is they die from an involvement of the arteries of the extremities thence extending up to the trunk. In listening to this vivid description of death from thirst there came to my mind a picture of death from "shock;" first a depression of the vital powers, this depression affecting the nervous system which in turn leads to depression of the circulation followed by contraction of the arteries generally, but more especially the capillaries and superficial arteries. Just in proportion to the extent of arterial involvement comes the surety of fatal termination. This description brings to my mind the history of a case

where a man in a railway wreck received such a shock from fright that his finger and toe nails together with his hair and beard had died, the influence exerted through the vaso-motor nerves by the impression being so great as to impair nutrition to such an extent that the patient never recovered. The real difference in death from excessive thirst and death from "shock" is only the length of time involved in each process: both die from contraction of the arterial system, the superficial vessels and capillaries then the larger vessels, extending in both instances from the extremities to the trunk and center of circulation. Arterial contraction is the cause in both instances, backed by a weakened heart. From the descriptions of death from freezing, the *modus operandi* is the same, arterial contraction extending from the smaller to the larger vessels.

The President:—Did his wounds heal rapidly and kindly? What was the elevation?

Dr. McGee:—The altitude of the lowest tank and of my camp-site at Tinajas Altas is about 1400 feet. The leading physical characteristic of the region is the purity of the air; Sierra Gila is the most utterly barren range with which I am acquainted, and the plains on either side are typical deserts with too little life to contaminate the air—hardly enough, indeed, to contaminate the few barrels of water gathered in the tanks during the midwinter and midsummer rains, and freely exposed during intervening months. No doubt the healing of Pablo's wounds was greatly promoted by

the purity of the air; certainly there was no indication of gangrene. All of his nails became discolored, as did most of his phalanges, soon after circulation was restored in his extremities, and for a time I feared sloughing; but it did not occur. He lost about half of his hair, and the rest turned gray—perhaps half of the remaining headhairs (among which but a very few were gray before) with a third of those of his beard and body hair became white.

Regarding the use of water in athletic training: In my opinion, the experience of trainers of footballists and pugilists is worth much, and their practice is sound. The object of training is to develop a somewhat abnormal condition of the organism, a condition in which tissues are hardened and toughened by so modifying the normal balance between waste and repair that first the former and later, the latter are retarded.

In reply to the questions by Doctor Moore and Doctor Fleming: Pablo's stertorous breathing continued until sometime after we reached him; the condition changed gradually as the membranes of mouth and throat became saturated. At first it was of such loudness as to be easily heard 50 or 100 yards and accompanied expiration, the sound being a moan rather than snoring, though not produced by the vocal organs and apparently not controlled by volition. The distance to which the sound was heard may have been due in part to concentration between the converging walls of the gorge in which the camp was located; yet its audibility



to us was doubtless due largely to our habitude to the noiselessness of the desert night—a stillness so nearly perfect that the ear soon learns to detect the sound of a creeping insect yards away. So accustomed was I to the hearing of sounds at considerable distance that until Doctor Moore raised the question it did not occur to me to think of our hearing Pablo's stertorous expirations nearly a quarter of a mile away as at all remarkable.

Dr. Henderson:—Was there any permanent change in the man or was he finally restored to his former fine condition?

Dr. McGee: I followed the case only about a week, but I happen to know that Pablo and Jim Tucker have since gone out on another search for the "lost mine" so that he must have been practically restored to health and vigor.

I may venture to express the opinion that pure water would have been better than salt solution for the restoration of the thirst sufferer. What he required was increased volume and increased liquidity of blood. If I had had surgical instruments I should have tried injecting a little water in the desiccated extremities, and should have avoided the salt solution in the fear that his tissues were already overcharged with saline matter; in the absence of apparatus I sought to attain the same end by external application of water, trusting to osmosis to convey the water into capillaries and veins and thus into the circulatory system. Perhaps salt solutions might be beneficial in such cases, but remembering the essential-

ly mechanical nature of thirst and the concomitant overloading of the blood with solid waste, my prepossessions would be against their use.

Dr. George Gellhorn:—The opportunity rarely presents itself to observe such extreme degrees of thirst but there are reports of some such cases found in medical literature. In 1899 Strubell, assistant to the University Clinic, at Jena, conducted a number of experiments with patients suffering with diabetes insipidus by reducing the daily amount of water required. In one case he completely cut off the supply of water for a number of days in order to investigate a number of problems and he did not discontinue this cruel treatment until the patient became violently delirious and was at the point of death. This patient's voice could be heard over the university grounds; the noise was so loud that it attracted attention and Dr. Strubell was made to discontinue the experiment. In this case the blood had thickened and the tissues had become dry. The experiment created a storm of disapproval all over Germany and Strubell was dismissed from the university.

Doctor McGee, In closing:—I may be permitted to emphasize the opinion that the whole subject of thirst is of interest and importance. On returning from Tinajas Altas through Yuma about the end of August, I noted in the Yuma and Los Angeles papers the details of the latest fatality from thirst in Death Valley, the items casually mentioning that it was the *thirty-fifth* for the season in that district



alone! Southwestern United States is in the throes of industrial development stimulated by the irrigation projects of the government and by several railway and mining enterprises; with the advent of uninured workmen and settlers, unaccustomed to the estimation of distances and ignorant of the appalling rapidity with which evaporation proceeds in arid regions, the danger of thirst-death seems to be an increasing one;

and it would seem to me to behoove the makers of medical science to devise and diffuse improved methods of alleviating thirst torture, of restoring the thirst sufferers who occasionally straggle into the settlements, and of providing the more thoughtful denizens of the deserts with such preventive or ameliorative devices as medical science may be able to produce.

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## THE STATE SANATORIUM FOR THE TREATMENT OF INCIPIENT TUBERCULOSIS.\*

BY L. C. MCELWEE, M. D., ST. LOUIS.

From the earliest dawn of medical history, humanity at large and the medical profession in particular, have been obliged to unfurl the flag of truce to the black crest of tuberculosis in one form or other. Until now, the pulmonary variety has been, with only occasional exceptions, so universally fatal that medical skill of whatever kind, or in whatever age, has been utterly baffled in its efforts to combat and control this disease. Fatal terminations of practically all cases treated have occurred with such mathematical precision that hope for life of the patient has been abandoned on the part of family and friends on the announcement of the diagnosis and the physician making the diagnosis, made heartsick and overwhelmed with chagrin at his utter helplessness to avert the swiftly approaching calamity. So certain has been

the end that positive calculations have been made by the soon-to-be deceased or his heirs as to the post mortem disposal of his property, or the details of the burial permit by the hapless medical attendant.

But the sombre tone of this picture has been illumed by the light that has shone from the pine-crested summits of the Adirondacks during the past twenty years. Although at first a mere thread, the band of light streaming out of this place, has grown to be a great flood of golden, glorious light pouring over the entire civilized world, lighting up the remotest crannies with redolent radiance, until the eyes once dimmed by uncertainty and despair, now see with assurance and comfortable satisfaction, the realization of shadowy hopes that flitted to and fro in their minds and mingled with their fears in days of yore. The dead-

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\*Read before the St. Louis Medical Society, meeting of February 24, 1906.

house and dissecting room have for long established beyond peradventure the fact of sporadic cures of tuberculosis of the lungs. The history of these cases, if it could be obtained, often would reveal the surprising fact that the patient had either not been aware of the diseased condition of his lungs, or if so, had taken no treatment to alleviate it. But one conclusion could reasonably be drawn from these premises; and that was, that the omnipresent and all-conservative *Vis Medicatrix Naturae* was chief of the only discernible curable agent. Though scanty in extent and details, the facts served as an inspiration to the minds of the genius who saw them and laid them up in the granary of observation against the day when they might be turned to account for good for the entire world. To imitate nature's process as nearly as possible and to promote and stimulate its operations, was the aim and object of Dr. Louis Trudeau of New York City—himself a subject of the malady—who more than twenty years ago formally established what was probably the first sanatorium for the treatment of incipient pulmonary tuberculosis in the world. The causative factor of the disease had just been discovered, demonstrated and published to the world by Koch, but the *modus operandi* of the pathogenic action of the tubercle bacillus was not so well known then, if at all, as it is now.

But it was then and has ever since been apparent that the incipient cases were the only ones, as a class, in which a more or less permanent benefit could be obtained for the

sufferer. Such a thing as a permanent cure to be obtained was dreamed of only in the reckless abandon of the imaginative fancy of the most prodigal optimist. But the lessons of the dead-house and the dissecting room were fixed indelibly on the minds of certain genii, and while the main column of the medical army marched along its weary way of diurnal routine, these master minds were revolving around this pathological vortex, evolving plans of cure which are now delivered to us in all the beauty of mature development. It matters little to us or to those to be benefited, that the period of gestation was twenty full fat years, or that the creature delivered is one of twins; the other now presenting with prospects of imminent engagement and reliable promise of early delivery.

It is not now too early to foresee that there will be two placentas, because, contrary to custom, *one* has already been delivered in the form of the State Sanatorium; the other having been forecasted to be a certain powder which is called by its discoverer "T. X."

After the rupture of the amnion of, perhaps, pardonable secrecy has disclosed the finished product, it will, of course, be better known, both as to appearance and effects. The prodromal signs, however, seem to indicate that the second or junior twin will materialize in the form of an especially prepared food or article of diet. Should this suspicion become a fact, it is unavoidably sure that the pair will grow and flourish together under the same roof-tree and contribute to each other's mu-

tual benefit, and together accomplish the desired cure of the patient taking them thereby reflecting glory on their progenitors and conferring health on thousands and tens of thousands of those coming afterwards, and happiness on all concerned.

The plan already delivered to us and in vogue now in more or less all civilized countries, contemplates the fullest development of the aforementioned *Vis Medicatrix Naturæ* and accomplishes the cure credited to it so far as we are able to know, through this means alone. No medicines of any kind being given with the specific end in view of in any way influencing the pathological process in progress in the lung. The chief positive factors being a highly nutritious and easily digested diet, administered according to the best known physiological facts concerning digestion, combined with an unhindered and unlimited supply of fresh air, thus building up tissue and promoting constructive metabolism in as far as possible, and out of this a maximum of vital energy is developed. The negative element in this plan is the enforcement of physical inactivity or rest, that the system may not expend any energy generated by the oxygenation of the ingested proteids and fats in the tissues for any other purpose than resisting the attack of the cohorts of bacilli in the infected areas and their toxins in the blood and the development of a maximum of constructive vital energy.

The time is not remote from now when it was generally deemed necessary that a climatic cure should

be associated with a considerable altitude. Hence mountainous regions have been, and are yet generally considered as essential to good results in tubercular sanatoria. The rarity and dryness of the air as well as its purity have been credited with the benefits and these factors were evidently uppermost in the mind of Dr. Trudeau himself, when he located his sanatorium, for when he built his first cottage, he erected it well toward the summit on the highest part of the highest hills he could find in the State of New York. In addition to the air and altitude it was for long thought that the balsamic breezes of the pine forests of Minnesota and Georgia were the healing agents, when the patients who recovered there returned to their homes and accustomed occupations. Dr. Trudeau was not unmindful of this phase of the case, and located his cottage in the midst of a pine forest, at once obtaining altitude, unlimited rare air and that made balmy by the aroma and the fragrance of the pine trees abounding thereabouts.

But the unmistakable cures that were made on the torrid plains of Texas were just as real and brilliant as those of the Rockies or Adirondacks, but there was no altitude to account for them; no dry air, nor fragrant pine forests, but still the patients recovered. Dr. H. McHatten mentions a notable instance in which some ten families of Spanish nobility, who were so extremely infected with tuberculosis that they were confronted with the alternative of decimation or the discovery of a cure. They migrated to the in-



terior of Central America, and without other influences than those provided by Nature, or intermarrying with the natives, became entirely free from infection and in the course of a few decades, were entirely well. The pronounced cases terminating fatally, of course, in the beginning, but on the whole the disease was arrested and finally exterminated, and that individual community is now and has been, free from the stigma of tuberculosis, these fifty years. The one salient curative factor in all these cases is fresh air. And to the physiological chemist that means oxygen, and oxygen means systemic activity, and systemic activity means augmented vital energy, and augmented vital energy means a maximum of vital resistance, and that means death to the tubercle and other bacilli, and all that means cure. *Vis Medicatrix Nature Triumphant!!!* and thereby hangs a tale!

In the process of the evolution of the tubercular sanatorium it has come to be an acknowledged fact that altitude does not play the all-important role in the cure of phthisis that was so long ascribed to it, although it is not to be in any wise deprecated or ignored, yet it is not an absolute essential, for instances are abundant where the most brilliant results are being obtained at sea-level, and in one place, a considerable distance below it; the most notable of which are in New York City and Philadelphia. In these cities cures are being made daily with the patients in cots on the roofs or in the upper stories of houses with all the windows open,

with the smoke and grime, unavoidably incident to the city, notwithstanding. The first notable change for the better in these patients that become residents in a sanatorium, is the disappearance of the fever. Following that the cough, and coincidentally, the disappearance of the bacilli from the sputum, and the expectoration itself and the slight hæmorrhages, if there have been any. The weight then increases more or less rapidly according to the weather, being most noticeable in the cold weather, and the colder the weather, the more weight taken on. The barometer shows that the air then is the most dense and is dryer than in any other condition, and all this means oxygen, and this means exhilarated function and molecular activity, which is a condition entirely inimical to the bacilli and they die. The chief essential, the grand characteristic of this plan of treatment is the enforced and invariable life in the open air. Day and night, winter and summer, wet or dry, hot or cold, clement or inclement; sun or rain, no breath of air must be taken that bears a suspicion of having been ever breathed before. All other aspects of the treatment are considerations of detail merely. They are of importance or not in proportion to how much they contribute to the bodily comfort of the patient and preserve his vital energy. Because the system of the patient pays a large percentage of profit on daily balances, when no checks are drawn against the savings account, but on the other hand, charges usurious rates on any draft that may be made on the original deposit, for

whatever reason. This soon becomes apparent to the most giddy subject (who, as you know are people who range from 15 to 35 years with the great majority of them being in the near neighborhood of twenty) and they are quite willing to economize on vital energy, when they have been in the place a fortnight. The most delightfully striking feature of the patients as a class that presented itself to us, when we first entered a sanatorium, was the absence of the characteristic faces of phthisis. When our carriage first entered the grounds of the Trudeau Sanatorium we met a couple of lasses about 18 years of age coming out of the grounds bare headed and bare armed to the elbows. Their cheeks were as ruddy as bell-flower apples and their eyes were as bright and sparkling as if they had just gotten money from home. Their gait was decided and elastic with a swing that denoted strength and freedom from restraint of any kind. To our great surprise, the driver told us that these were patients in the sanatorium, and greater still was our surprise when we found these characteristics were true of the entire two or three hundred patients save the few, (ten or eleven) who were sick abed in the infirmary. All the ambulant patients spoke of their improvement and ultimate cure with the utmost assurance and in the most matter-of-course tone of voice. The time required to complete a cure is from two months to two years, according to the degree of infection and the recuperative power of the patient. The only patient that we saw whose record showed a cure in

two months, was a man aet. 32, in the Rutland, Mass., Hospital, who had submitted to a hypodermic injection of 5 cc. of tuberculine as a diagnostic measure, on his first admission to the institution. As this procedure was not routine and was only practiced with the patient's consent which was often denied, through ignorant fear, no satisfactory data could be determined on this point. The Trudeau sanatorium consisted of some 32 detached cottages, scattered in a desultory manner over the eastern slope of a big mountain and accommodated in the neighborhood of two hundred and fifty patients. The institution is maintained entirely by private benefactions and the income from the patients, which averages nearly \$15.00 per week; the cost of construction is enormous, for the donors of the cottages have seemed to vie with each other as to who could expend the largest amount of money in the smallest scope, no detail being omitted that might contribute to the comfort of the patient or cheer the tedium of the enforced idleness (rest) incident to the sanatorium discipline. Although handsome fortunes have been expended in several of the cottages, we saw only two which met with all the requirements of the occasion, and they were built to accommodate only four patients each, at an individual cost of some \$15,000.00. The New York State Sanatorium is located some four miles from this at a little railway station called Ray Brook, and in its present uncompleted form, represents an expenditure of \$225,000.00; is an epitome of all that it



should not be. The superintendent and assistants warned us not to adopt its chief features into our institution, for they were not proving, and would not be satisfactory. It is a four story brick building, arranged in general, on what may be termed, the ward plan; *i. e.*, the large wings were composed of wards, one above another, so that a great number of patients could be accommodated indoors at night, and was intended to be economical, but had not resulted in accomplishing either economy or accommodation. The Commission visited this institution on Sunday afternoon, and as we were around the grounds and through the buildings for several hours the time for supper had arrived before we were ready to leave. The matron kindly invited us to take this meal with her before we left. When all of the patients and we were seated, we naturally expected to hear more or less coughing on the part of somebody during the supper hour, but to our pleasant surprise we heard not one single cough by anybody during all this time, and while we were inspecting the buildings and grounds, heard only one patient coughing, and she had been there only two weeks. This peculiarity was characteristic of all the sanatoria visited, and will be of ours.

The Rutland, Mass., buildings were better adapted to the needs of the occasion, but were faulty in that the narrow portion of the building is presented to the south. They are arranged like the fingers of your hand when extended and strongly abducted, with the administration building corresponding to the wrist.

They represent an outlay on the part of the old Bay State of \$600,000, with a capacity of 250 or 300, and a cost to the state of \$9.00 per week per patient. In the plans as proposed by our architect and adopted by our Commissioners, you will find that all the comfort and convenience, and even luxury of the "cottage system", and all, or most all, of the economy of the "ward plan," have been accomplished. The completed institution, which contemplates an outlay of \$375,000, will accommodate 250 patients, exclusive of the necessary help and superintendent and assistants. It will consist of ten one-story villas, with a capacity of 25 patients each, having a frontage of 80 feet, southern exposure, by depth of 35 feet at the ends east and west. The sun will shine into the front of these buildings for eight hours each winter's day, and proportionately longer each day as the sun approaches the summer solstice. All these buildings will be arranged on either side of the triangle, with the base extended towards the South and along the brow of the hill on which the site is located. At the apex of the triangle pointing toward the North, will be the "Chateau," or Administration building, and behind that, further North, will be the medical villa, for the purpose of examining the patients on admission and from day to day to note and record their progress, operate upon any that in emergency might need it, and treat any that might for other causes, need medical attention.

While the architect calculates that the cost of the completed institution



will be \$375,000.00, we are now a long way from that end, and ominous clouds are beginning to darken the horizon in the form of opposition to the necessary further appropriations. The last legislature appropriated \$50,000 for the work in the first section of the bill creating the sanatorium and the Commission to locate and build it, but in the 11th section of the same bill restricted the cost of the grounds, buildings and furnishings, to \$25,000, so that the Commissioners find themselves handicapped by a paucity of funds, and try as they may, aided by the private benefactions of the citizens of Mt. Vernon, we will not be able to build more than two villas and possibly only one. It will be instantly obvious that we will be able to accommodate only 25, or possibly 50 patients to begin with, which fact alone is more than likely to create dissatisfaction among the physicians over the state, because each man who has an incipient case on hand, is going to feel that his patient should be admitted, as one of the favored few. As there will be at least 500 cases of that kind throughout the state at the time of opening the sanatorium, that we will now be able to build, this possibility is deplorable in our sight, for we are depending on the hearty cooperation of the state medical profession at large to secure the very necessary and much needed appropriations to complete the work now begun. The question that now arises with almost painful pertinence is: can the Commissioner or Board of Managers count on the loyal and unremitting efforts of the physicians

throughout the state for their influence in the halls of the legislature when the proper time comes? It may easily be argued that the state now does, and has for many years, assumed the care of the hopelessly insane, both respectable and criminal, the epileptic, imbecile and feeble-minded, all representing a class of unfortunates from whom nothing can be or is expected in return for the service given, while the blind and deaf and dumb are provided with liberal assistance in preparing themselves for their limited usefulness to themselves or the community, while we have here a class of individuals consisting of the essence of the best brain and talent of society, for whom a permanent cure is promised and whereby 75 out of every 100 of those affected will, in a reasonably short time, be enabled to return to family and home and health and the pursuit of happiness, becoming bread-winners in this work-a-day world and heroes in the struggle for existence. They will be able to repay interest to the state in money and, best of all, achievements, all that she laid out for them when they needed it, with a sum, that contemplated in the perspective of five decades, would appear as a stupendous figure, almost beyond the comprehension of the human mind, if it were required to be paid *en masse*.

Besides the schools for the deaf and dumb and blind, the state also maintains other institutions similar in principle, but differing in details, and the Commissioners feel that if the matter should be presented in the proper light to the profession and

people at large, the proper appropriation will be forthcoming. We expect to begin building with the money we have as soon as the weather will permit; and the ceremony of the corner-stone laying is slated for two days in the third week in May. The Governor will be the principal speaker of the occasion. The presidents of the various state medical societies are to be invited to be present and make speeches, as well as other dignitaries deemed serviceable to the ends of the work in hand. The officials of the Frisco Railroad have kindly agreed to run an excursion train from St. Louis, with a minimum round trip fare, and all present here tonight and their families and friends are cordially invited to make the trip. To those who are acquainted with the Southwest and its wonderful resources, the trip will be a delightful vacation, but to those visiting it for the first time, it will be nothing short of a positive revelation. A slight intimation as to the wonder to be unfolded there, is a spring on the site and a finer one across the road, which pours out crystal ice water in great volumes the year around and the banks of the branch running from them, are lined with the most fragrant mint, while the white pebbly bed is covered with crisp and juicy water cresses. The hospitality of the people of Mt. Vernon is as cordial and warm as the redolent sunshine of that clime and the spirit of welcome as fragrant as the perfume of the flowery woods and green fields round about.

There will be a power house in which heat and electricity will be

generated, and a sterilizing room provided for infected clothing, laundries, and quarters for the engineer, etc. But the location of this building has not been formally determined on by the advice of the architect. He advises that instead of having it at the base of the chateau group, on the crown of the hill, it will be more economical and equally efficient, if it be located on the western boundary of the grounds in a valley, and near the railroad track, where a switch can be easily constructed to it, for the easy and cheap delivery of coal and supplies.

I have omitted until now, to state definitely that the Missouri State Sanatorium for the treatment of incipient pulmonary tuberculosis will be located on a tract of 197 acres of land, donated to the state by the citizens of Mt. Vernon, the County seat of Lawrence County. As regards St. Louis, it is inconvenient, but is not so difficult of access at the worst; it is within easy access from Springfield, Carthage, Joplin, Webb City, Kansas City and St. Joseph and a number of other small cities and towns, whose total population more than equals that of St. Louis and her environs. The elevation or altitude of the site, is about 1350 feet, the law requiring that it be not less than 1000 feet above sea level. It is to be watered by the town pump of Mt. Vernon, free of cost, and electricity for power and light are to be furnished by the town power house for five years, also without cost to the state. Free telephone service for fifty years is another consideration. The buildings when all are done, will occupy the



most of perhaps twenty acres along the south line of the grounds, which are now covered with a dense wood, but which is being thinned out under the personal supervision of our president, leaving the balance, which is now in cultivation, to be cultivated by the working force of the institution, for their own support. For we will raise our own poultry and gather our own eggs; will raise our own cattle and milk our own cows; and churn our own butter; will have our own orchard and raise our own peaches and apples; will have our own garden and raise our own strawberries, which are particularly luscious in this locality; will have a truck patch and raise our own sugar-corn and sweet potatoes; grow our own asparagus and celery, lettuce and onions, so that those who are fortunate enough to get into this asylum (in the highest and best meaning of the word) will be, if possible, more sorry to leave than they were to enter it. By this arrangement, the cost of maintenance will be much reduced, (nearly \$5.00 per week) so that the cost to this state will be relatively small, as compared with the Eastern states. The average percentage of cures in other institutions of like character, but not so well arranged, is 70 per cent. of all cases admitted. With our advantages, we expect 75 or 80 per cent. of cures, but the largest benefit of the sanatorium will not be due to the work done in it, but to the teaching coming from it. Every patient graduated from it will be a harbinger for good in the community in which he lives, and the methods of precaution and sanitation

practiced in the sanatorium will be diffused abroad, until the filthy habits of consumptives as now practiced will be supplanted by the simplest forms of sanitary procedure. Instead of concealing as long as possible their condition, as is now done, the patients will aid in the diagnosis instead of concealing it; the physician will be more encouraged to declare the diagnosis when made; wheretofores he has not always felt like so doing, because it has usually meant the announcement of the patient's doom. Through general educational influences, the disease must necessarily be lessened and finally exterminated, because not only of the ability to cure, but of the more potent ability of its general knowledge and the practice of prevention. While all these advantages have come out of an absolutely drugless management, I am one who is optimistic enough to believe that when as much attention is given to the development of a scientific therapeutics as is given now to surgery, we will have cures of tuberculosis as much under our command and control as we now have diphtheria. It is quite evident even to the casual observer, that we are on the threshold of a great philanthropic movement which shall be limited only by the confines of the earth. In assuming the charge and care of the victims of consumption the state has embarked on a course of charity only possible in the light of twentieth century development and philanthropy.

The great pale face army that heretofore has yearly marched on to certain doom and physical destruc-



tion, is now brought to a halt on the brink of eternity by the bugle call announcing their emancipation from the thralldom of tuberculosis. The music swelling from the throats and exultant hearts of the friends and loved ones is no longer accompanied by muffled drums, nor has *Miserere* for its key-note. The song is now full of color and triumph. Exultation is the key-note and it reaches a crescendo in a grand diaphason of rolling drums and popular acclaim. *Verde* is replaced by Haydn, the spirit of Creation is substituted for that of melancholy and one can scarce repress the exclamation,

"Oh, Tuberculosis! where is thy victory?"

Oh pathology! where thy sting."

#### DISCUSSION.

Dr. William Porter:—The outlook is good. Twenty years ago we could not say that. Ten years ago the work had just begun. The statement has been made recently that at present rates in twenty years tuberculosis may be as unknown in Germany as is cholera, and in forty years it will be the same in England. The results in this country are owing to the quiet but potent influence of such men as Trudeau, the first president of the national tuberculosis association.

Flick and Bigg, at present rates one in ten will die of tuberculosis, in the "country, one in seven in our cities. In New York and Philadelphia the death rate has been reduced forty to forty-three per cent. Apply that in our own city and you will see the large number of lives saved. Multiply that by

five and you will see what it means to our state. This is an economic question, also. According to statistics compiled in Illinois this disease costs that state over \$35,000.00 a year. Now, if we can save 40 per cent. of these lives and this money, the work is a good one considered on economic grounds alone.

The state sanatorium is only one of the features involved in this enterprise. It is not alone a question of the great good that will accrue from it directly; the larger question is that of the education of the masses. In St. Louis we estimate that we have 5,000 cases of tuberculosis today. In our city and private institutions we can shelter only 1 in 50 of these. In our state institution we will have accommodation for only 24 or 25 or possibly twice that many for the next two or three years. Along educational lines is where the great work needs to be done and is being done today. Our medical journals are full of this one subject. Trudeau wrote me recently: "the great fundamental need is the education of the people." And we need education along this line in the medical profession.

But how are we to educate the people? Our society for the limitation of tuberculosis last month issued 300,000 little pamphlets touching on the essential conditions of tuberculosis. This state institution will be worth every year what it will cost for ten years to keep it up. If we save 40 per cent. of the people who are now bound to die of tuberculosis we will rob the grave yards. How will we do it? By the profession backing up this movement.

I believe the best way to support this commission is to give it our unbiased thought and when necessary our suggestions. It is our duty in the greatest fight ever made for the health and happiness of the people of our state. I think this little \$50,000 is a sort of feeler. If this committee as our representative makes good use of that it will be no great trouble to get more money.

The control of the patients ought to be a large factor in the arranging of these pavilions. When you get one hundred patients, whether in the incipient stage or the advanced stage, it means a great deal of care. At Mount St. Rose we have the extreme cases also, but we find that the night and day service, the watching of the sputum cups, the cooking, etc., require much care and the amount of personal supervision is so large that sometimes I shrink from it. When these cases come to the state sanatorium they will come for months and longer. The cases that get well in a year are not the exception, while those that get well in two months are rare. They should not be discharged until the evidences of cure are certain.

We are well in advance of most of the western states but I hope that nothing will be done to limit this advantage. These plans are very attractive but if the charge should be brought that they are not as economic as might be it will be very hard to get an adequate appropriation.

Dr. Geo. Homan:—Dr. Porter has stated what appear to be the main objections one being the initial cost. If funds were available without further action on the part of the legislature this would be a very fair

scheme, but it looks as if the first cost would be large and this may be used adversely by those who are not disposed to cooperate. I don't know that this society is in a position to do very much if the architect has fully settled these plans and they have been approved by the board. It seems obligatory by the law that the buildings be made of stone or brick. It was my impression that the buildings for patients' use might be of an inexpensive character. They might be made of frame and the cost minimized in that way. I suggested to Dr. Bayless, the president of the commission, some months ago the possibility of temporary shelter, simply frame and canvas structures, by which a number of patients might be accommodated. But I judge from what Dr. McElwee says that that is not feasible as the law reads. I presented a historical sketch of the movement which has culminated in this institution, at the Missouri State Medical Association last May which was read by title only. I would like at some future time to present this to you, and to briefly indicate the beginnings of this movement and those who were responsible for its success. Dr. Porter was one of the originators of the society for the prevention of tuberculosis here, and Dr. Lutz Porter, Funkhouser, W. G. Moore and myself were the members of the committee from this society which acted in conjunction with other societies in conducting the campaign which resulted in the creation of this state institution. The appropriation originally asked for in the bill was \$100,000 but this was reduced to \$50,000 and it ap-

pears that as the bill finally passed only \$25,000 was made available for construction purposes. Instead of \$50,000 only half that amount can be used for building and the commission is hampered to that extent in its plans.

Dr. James Stewart, Holstein, Mo.:—I am very glad to see this movement progressing so nicely. If I am fortunate enough to be returned to the legislature I will work hard for a greater appropriation. I think we need this institution and I believe we have the men in this state to take care of the institution. I pledge myself that if I am returned we will have a more generous appropriation than that we have already received.

Dr. Victor A. Bles:—I lived in Colorado for many years and I saw a great deal of tuberculosis. Of the men sent from the east in the first stage of tuberculosis, examination showed that in many cases they had no tuberculosis. Some things in these plans should be changed, other parts are very satisfactory. The great object is to obtain oxygen. While a high altitude acts as a tonic yet it later affects the nervous system. The cities as they grow are less desirable for tuberculous subjects and again, while the areas in the lungs heal rapidly, the climate is so trying and the air so irritating that we find many cases of tuberculosis of the larynx and these patients simply starve to death. The open air treatment is now much in vogue. I would suggest that these patients be given a great deal of air for sleeping as well as for work. The rooms should be built so that one portion may be taken out and,

in very inclement weather, shut down or closed again. In the Oaks Home in Denver, there are three departments, for the incipient cases, the more advanced cases and the very bad cases. The herding of such patients is not a good thing. They sit together and compare notes on diet and doctors and haul out their thermometers. We all know the desire to live that is characteristic of these patients, yet that desire can be cast down by the merest suggestion, so I believe the cottage idea is better than to place any great number in one building.

Dr. L. H. Behrens:—I think in the city institutions as a rule they receive patients in the third stage almost entirely in other words, the larger per cent. who go there die. The ward method is all right there—but I believe that the ward system of treating phthisis pulmonalis in the earlier stages is a curse. The plans are on the right idea but they could be simplified. We should demonstrate how many people we can treat with the money we have and the people will help us to get the necessary legislation for more. There is no comparison between our city tuberculosis sanitarium and the state sanatorium. This is to try to cure patients—a cure that will last. We should remember that the people who will go to those institutions are very poor. They are not accustomed to luxuries. If we sent them to a fine sanatorium they would not feel as much at home as if the place were more plain and besides we will get the same ultimate results, I am in favor of any system whereby we can do much for a great number of the unfortunates.



## SYMPTOMATOLOGY OF PNEUMONIA.\*

BY J. R. LEMEN, M. D., ST. LOUIS.

In no infectious disease do we have the initial symptom of chill so frequent as in pneumonia; even in malaria we have prodromes that lead us to expect the chill, whereas in pneumonia it comes on suddenly when the patient is apparently not greatly indisposed. After the chill the fever rises rapidly to 103-105 degrees, and this is accompanied with great pain, usually referred to the mammary region, but which may be located in some distant area. The pain is supposed by some to be due to pleuritic involvement but it seems probable that the inflammatory condition of the lung is responsible for this pain, as when the pleurae alone are inflamed we know that the pain is confined to or near the involved pleura. The dyspnea is great depending upon the extent of the lung area involved in inflammation and on the toxic effect upon the nerve centres. The respirations increase in number to 30, 40 or 60, the movements are restrained owing to pain, the expiration ends in a grunt. The pulse rate rises with fever, but not to the extent that occurs in other febrile diseases. The ratio between respiration and pulse is disturbed greatly in pneumonia, the ratio instead of one-quarter dropping to one-half, or one to two and one-half. This by some is considered of prognostic value. The pulse is us-

ually accelerated but not to the extent that we find in other febrile diseases. The pulse is full and bounding at first, but may weaken under the increased pressure in the pulmonary circulation. The second sound is accentuated, owing to this tension, and we believe that herein lies one of the great dangers to patients with pneumonia, the pulmonary blood tension.

The cough is very painful, frequent, single, and dry, but on the second or third day the patient may commence to expectorate the characteristic sputum. However, there may be such intense congestion that hæmorrhage will take place at the beginning of the attack. Cerebral disturbances are common and the patients may become delirious. This is especially true in apical pneumonia, and the tendency to insomnia is often one of the most annoying symptoms that the physician has to combat. The fact that there is great tendency to herpetic eruptions is noticed, and may be of value in making the diagnosis as these eruptions are absent in other diseases of the respiratory organs. The blood feature is the leucocytosis, which may be enormously increased, and in those cases where it is absent the prognosis is grave; in two cases of a febrile pneumonia under my recent observation, in which the leucocyto-

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\*Read before the St. Louis Medical Society, meeting of March 3, 1906.

sis was very small, the termination was unfavorable. The urine is high in color and specific gravity, the chlorides, however, being diminished

which is probably best explained by the Koranyi theory of molecular interchange in the kidney.

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## THE PATHOLOGY OF PNEUMONIA.\*

BY LOUIS M. WARFIELD, M. D., ST. LOUIS, MO.

With the advances in our knowledge of the infectious diseases, we have learned that the organisms producing these diseases, while causing local lesions in various organs, produce toxins that are transmitted by the blood stream to all parts of the body. It was a great surprise to learn that there could be such a condition as typhoid fever without macroscopic intestinal lesions, and although there are still some who, in their treatment of typhoid fever, seem to cling tenaciously to the idea that to cure the intestinal ulcers is to cure the disease, pathologists and most clinicians believe that typhoid fever is a constitutional disease with the lesions caused by the bacillus typhosus located primarily in the ilium. It was long before the idea that lobar pneumonia was a constitutional disease with local lesions in the lungs, replaced the old idea of a specific local disease. But the facts that have been brought to light leave no doubt that we must look on pneumonia as we do on typhoid fever, or diphtheria, or tetanus, etc. Man and the higher apes are the only animals that naturally are susceptible to pneumonia. The ordinary laboratory animals do not

contract the disease, but by inoculation the typical lobar pneumonia can be produced. If a mouse, rabbit, or guinea pig is given a subcutaneous injection of the pneumococcus it rapidly succumbs to a generalized infection and at the point of inoculation certain changes occur depending on the virulence of the organism. In dogs, rabbits, and large animals, pneumonia with local lung lesions can be produced by injection into the tracheæ or lungs of cultures of pneumococci. Apes in captivity are very susceptible to pneumonia and many have died that have contracted the disease in menageries where the temperature variations have been great. Pneumonia is a disease that shows striking peculiarities in its season occurrences. It is wide spread and wherever encountered it has been found that the months during which there are much dampness and sudden changes in temperature are those showing the greatest number of cases. That it is a very fatal disease no one will deny. In hospitals, the percentage mortality is found from 20 to 25. This is somewhat lower in private practice. Since the pandemic of influenza several years ago it has seem-

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\*Read before the St. Louis Medical Society, meeting of March 3, 1906.

ed that pneumonia is on the increase. Probably the lowering of the bodily resistance by the influenza has been largely responsible for its increase. That the old idea of cold and chilling the surface as factors in determining the onset of pneumonia must be acknowledged, are shown by some experiments conducted by Lode. He found that when animals were shaved, kept for a time in a warm place, then transferred to ice water or cooled rapidly in a draft, and a culture of pneumococci then injected, these animals succumbed in 24 to 48 hours, while control animals which received only the injection remained well. Guinea pigs which had been treated this way and had then received inhalations of cultures of pneumococci perished in two or three days from double pneumonia with hepatization.

Since Sternberg, of Washington, in 1880, discovered that there was something in his sputum that, when inoculated beneath the skin of a mouse, killed it in 24 to 48 hours, a great mass of research work has appeared. To Frankel belongs the credit of publishing first his researches and of showing beyond doubt that the cocci that caused the death of the mouse was the same that caused acute lobar pneumonia in man. This organism, called by him *diplococcus lanceolatus*, fulfills all the postulates of Koch, and thus can be said to be without doubt the cause of the disease in question. Pasteur and one or two others in France discovered the toxicity of the saliva about the same time that Sternberg discovered it. This is however not the only organism con-

cerned in this disease. Friedlaender in the 80's described a short, thick bacillus that he found in cases dying of what was clinically lobar pneumonia, and for a time there was much confusion between this and the *diplococcus lanceolatus* of Frankel. However, later researches have shown that the two are different bacteria and that, while the so-called pneumo-bacillus can and does produce typical lesions of lobar pneumonia, it is a comparatively rare cause.

Recently, Schottmueller, (*Munc. Med. Wochshft.*, July 25th, 1905, has described six cases of typical lobar pneumonia in which he found the *streptococcus mucosus* in pure culture in the blood, and in one it was also found in pure culture in the pus of an empyema. In the other five cases the organism was found post-mortem in the lungs and other organs generally in pure cultures. While this discovery apparently adds another etiological factor to our list, it will be shown later that such is probably not the case. The most important and complete work that has thus far been published, has recently been done by those working in connection with the Pneumonia Commission of the New York Board of Health. It seems very pertinent to give in brief a summary of the work as it has an important bearing on the pathology of the disease. These studies were made on the pneumococcus by men in several cities, then sent to New York, where they were all studied critically by one man. On the whole the results were more uniform than might have been expect-



ed. They confirmed work that had been previously done and added some interesting observations on the presence of the pneumococcus in the sputum and throat secretions of healthy persons and of those ill with pneumonia, besides settling the question of the unity of the pneumococcus and its relation to the streptococcus and to the streptococcus mucosus.

The conclusions of W. H. Park and A. W. Williams (*Jour.-Exper. Med.*, 1905), in a study of 200 cases may be given in full. They found that typical pneumococci were present during the winter months in the throat secretions of a large percentage of healthy individuals in city and country. That a higher percentage of typical strains of pneumococci has been obtained from healthy persons than from those suffering from pneumonia. In the latter cases the atypical strains may have been overlooked, because of the larger number of pneumococci present. Many of the atypical strains seem to be closely related to the streptococci. That the so-called streptococcus mucosus (Schottmüller) which has been hitherto classed with the distinct streptococci, is placed as a definite variety among the pneumococci, and it is recommended that the name be changed to *streptococcus lanceolatus* var. *mucosus*. It is this conclusion that throws doubt on the cases reported by Schottmüller of the discovery of a new cause for pneumonia. It would seem that the organisms that he found were atypical pneumococci or rather a variety of the typical pneumococcus. Further, Park and Wil-

liams say that a lower percentage of strains of pneumococci virulent for rabbits in the doses used has been obtained from normal cases by rabbit inoculations of mass cultures, than from cases of pneumonia by the same method. That since the virulence of pneumococci may be rapidly increased for a susceptible species of experimental animal by successive passage, and since the pneumococci obtained from most pneumonias are more virulent for experimental animals than are those obtained from healthy individuals therefore the virulence of pneumococci from cases of human infection is probably increased for human beings, hence, cases of pneumonia should be considered to be to a certain degree contagious, and since the virulence of the pneumococci may be quickly increased, and since the organism is very prevalent in normal sputum, all possible measures should be taken to restrict public expectoration.

That by repeated inoculation into sheep of a pneumococcus strain, a specific protective power of this serum for mice is developed against the homologous strain and against certain other strains, one morphologic variety (*streptococcus lanceolatus* var. *mucosus*) being thus differentiated from other strains.

The natural habitat of the pneumococcus is in the throat secretions of man. Although it has been found in the dust of a ward in which pneumonia patients were, it is doubtful if it would survive long outside of the body. Thus, F. C. Wood studied the viability of the pneumococcus after drying and came to the con-

clusion that the life of the pneumococcus in moist sputum is of considerable duration, the average period being somewhat less than two weeks, unless the material is exposed under direct sunlight. The dried sputum masses retain their virulence for a long time, 30-35 days in the dark; and sweeping, dusting, or brushing the contaminated articles will distribute pneumococci in the air. The organisms in the sputum do not remain long in suspension and die off rapidly under the action of light and desiccation. In sunlight or diffuse day light the bacteria in such powder die within an hour, and in about four hours if kept in the dark.

Wood also believes that when a patient coughs, expectorates or sneezes, particles of sputum or saliva which may contain virulent pneumococci are expelled from the mouth. Such particles remain suspended in the air for a number of hours if the ventilation of the room is good. They may be inhaled or deposited on articles in the room. However they become harmless in less than an hour and a half, while many pneumococci in the spray perish in a few minutes if exposed to strong light. Longcope found that a 24 hour bouillon culture of a pneumococcus taken from a stock culture that had been kept for one month at 10 degrees C, killed a rabbit when only .0001 cc was used. This was the original, M.L.D. His most virulent cultures came from cases of empyema and from the cerebro-spinal fluid in cases of meningitis. Attention has been directed in recent years to the contagiousness of pneumonia.

For some time from the pens of writers all over the world have some records of undoubted cases of pneumonia contracted by contact with a patient suffering from this disease, and indeed ward epidemics of pneumonia have been reported. From the work of Wood cited above it is not surprising that such cases do occur. As a rule, pneumococci from a patient ill with pneumonia are more virulent than those from the throat secretions of a healthy person. In number they are far greater, the favorable soil then is the only necessary factor to produce the disease. It has been stated that pneumonia should be considered as a general infection with the pneumococcus. In proof of that statement many observers have found the organism in the circulating blood in pneumonia patients. Prochaska, Cole, Kinsey and others have been successful in the cultivation. The writer has also succeeded in recovering pneumococci from the blood in a few cases. The most successful results are obtained by using flasks of bouillon or litmus milk thus diluting the blood many times. Kinsey states as a result of his studies that the finding of the pneumococci in the blood, has no prognostic value but when they occur in large numbers the case is as a rule severe. No investigator has found the organism in every case examined.

From the time of Laennec pathologists have been in the habit of dividing the morbid anatomical changes of lobar pneumonia into three stages. (1) The stage of acute congestion or engorgement; (2). The stage of red hepatization;

(3). The stage of gray hepatization. It is not purposed to describe these stages that are so well known and so well described in text books. The attempt rather will be made to pick out interesting points that have in recent years been worked out. The infection of pneumonia is caused by inhalation of the pneumococci. Having found in the alveoli conditions favorable to their growth they multiply and produce their toxins. The infection usually travels rapidly by means of the blood and lymph channels over a large part of a lobe, a whole lobe or several lobes. Frequently what is known as "creeping pneumonia" is seen. In these cases the infection attacks in slow succession several lobes instead of being confined to one lobe, or affecting several lobes almost simultaneously. It is possible for the infection with the pneumococcus to begin around the fine bronchioles as a bronchopneumonia, but such a state is not of long duration and the process rapidly assumes the lobar as opposed to the lobular type.

It is interesting to note that the right lung is much more frequently involved than the left lung, and two lobes of a lung oftener than a single lobe. The greater frequency of the infection of the right lung is probably due to the larger size and more vertical direction of the right bronchus. Of 489 cases (Steven, Sturges and Caupland, Osler and 125 cases seen by the writer at the Johns Hopkins Hospital in the two years from 1900-1902) the right lung was affected alone in about 50 per cent. of cases, the left lung alone in about one-third of the cases. In the stage

of congestion the capillaries are distended with blood and blood cells by diapedesis fill the alveoli. The lung is swollen and firm, red and beefy looking.

Pratt (*Contrib. to Sc. Med. by pupils of W. H. Welch*) found in the early stages of red hepatization large non-granular cells with nuclei not unlike the nuclei of the transitional cells of the blood. These are phagocytic and in them are seen polymorphonuclear leucocytes, red blood corpuscles, detritus. In a case that died eleven hours after onset where only red hepatization was found, no polymorphonuclear cells were seen in the exudate, only these nongranular cells were found. These cells are probably derived from the alveoli which are lined with endothelium (Mallory). In cases dying after the third day, the polymorphonuclear leucocyte was the predominating cell. The large phagocytic cell with vesicular nucleus which is certainly derived from the walls of the alveoli was found in nearly every case. Mitalic figures were seen in the alveolar cells. After the ninth day desquamated epithelial cells were found in the exudate in large numbers. Lymph cells, plasma, red blood and pigment carrying cells were constantly found. The fibrin is not secreted from the alveoli, but derived from the blood and is more abundant at the periphery of the alveolus than at the centre. The interstitial tissue is usually normal in appearance until late in the disease. It is then seen to be infiltrated with plasma cells, a fibrinous exudate is found in the stroma and often the



cells of the connective tissue were swollen and the tissue was oedematous. Thrombi were frequently seen in the smaller vessels and in the capillaries. Emboli composed of giant cells from the bone marrow were frequently found. Ribbert attributed the anemic color of the lung in gray hepatization to wide spread thrombosis. Pratt believes that both compression of the blood vessels and the thrombosed condition of many are the causes of the gray color rather than the substitution of white cells for red cells in the exudate, a view advanced by Aufrecht.

The lymphatics are involved late in the disease. There is proliferation of the endothelium and distension with cells, serum and fibrin. Death may occur at any stage of the morbid process, although usually the lung reaches the stage of gray hepatization and even partial resolution. But death may occur in the very early stage of red hepatization (*vide* Pratt).

In cases dying of uncomplicated lobar pneumonia there are rather constant lesions in other organs due in all probability to the toxins of the pneumococcus. The spleen although rarely clinically enlarged is the seat of cloudy swelling. Likewise the liver is in the majority of cases slightly enlarged and shows parenchymatous degeneration. There may be intense nephritis or only a mild degenerative condition of the tubules and frequently macroscopically cloudy swelling is seen. Longcope, in a recent article (*Bull. Amer. Clin. Lab.*, vol. 2, Jan., 1905) has found changes in the bone marrow of patients dying with pneu-

monia, that are quite constant. These changes consist in more or less extensive hyperplasia of the blood-forming cells, with a marked relative increase of the granular myelocytes, over the lymphoid cells. These changes were characteristic of all the cases he examined where a leucocytosis was present, e. g.: peritonitis, acute cerebrospinal meningitis, retroperitoneal abscess and puerperal septicæmia, besides the cases of acute lobar pneumonia. Accompanying every pneumonia, in fact a part of the morbid condition, is inflammation of the pleura. This may be from the slightest loss of the normal glistening appearance to the most intense fibrino-purulent exudate. Abscess in pneumonia is rare, one case in 125, but pus in the pleural cavity (empyema) and between the lobes is unfortunately not uncommon. The pus is thick, creamy consistency, yellow to greenish, yellow in color, and may almost completely fill one side of the chest. In pneumonia of the left lung where the process is in the anterior portion there is usually an infection of the pericardium by contact. Fibrinous, sero-fibrinous or purulent pericarditis may ensue, the latter being a very fatal complication. Of 125 cases seen by the writer, 4 had pericarditis and all died. In every case the left lung was the seat of disease.

*Endocarditis.*—Lesions of the heart valves are not uncommon and may be primary in a healthy valve or secondary on an already diseased valve. Myocarditic changes are always found. They consist in rup-

ture of fibres and infiltration with round cells.

*Meningitis.*—This is an uncommon complication but a very fatal one. The meningitis may be primary or secondary to an already existing pneumonia. In either case there is found thick pus over the convexity of the brain from which the pneumococcus can be grown. The wild delirium that sometimes occurs is not due to any meningitis but to the action of the pneumotoxin on the cerebral cells. Councilman, Mallory and Wright state that the meningitis caused by the pneumococcus is on the convex surface of the brain rather than at the base where the lesions of the diplococcus intracellularis occur chiefly.

*Peritonitis.*—This may be primary or secondary. Primary cases are usually in children and the prognosis after operation is good.

*Arthritis.*—Cave, Cole, and Campbell Howard have studied this complication. Cave reported 31 cases to which Cole added 11. Cole makes two groups of cases, (1) cases appearing as sequelæ or complications of acute lobar pneumonia, (2) cases preceding or occurring independently of acute lobar pneumonia. The condition is rare no case occurred in the 125 cases referred to above. The larger joints are the ones usually involved, though smaller joints are not exempt. Usually more than one joint is involved in a given case (13 out of 41 cases). Joints already the seat of a chronic affection are most likely to be attacked. The effusion is usually purulent but may be serous. The mortality is high, 28 out of 41 cases

Salpingitis, otitis media, parotitis and keratitis are occasional complications.

*Thrombosis of veins.*—This is an interesting and rare complication. Sears and Larrabee in 949 cases found it only 10 times. There was one case in the 125 cases of the series quoted.

W. R. Steiner (*Bull. Johns Hopkins Hosp.*, vol 13, 1903) has recently reported 3 cases and reviewed the literature. He found 38 cases reported. He says that in view of the fact that the blood during an attack of pneumonia is rich in elements necessary for clotting the very few cases on record is surprising. The condition usually occurs late in the disease even after the temperature has reached normal and the patient seems on the road to recovery. The veins of the leg are affected exclusively, the left more often than the right, and the usual symptoms of oedema, pain and swelling with the cord like condition of the thrombosed vein are present. In the cases that recovered, the function of the leg was not impaired.

*Pathology of the crisis.*—After a varying period of high temperature and severe illness, with no change in the physical signs there is a sudden fall of the temperature and relief of the dyspnoea accompanied by a drenching sweat. In 486 cases studied by John McCrae (*Amer. Med.*, 1904) 226 (60 per cent.) ended by crisis, 116 (28 per cent.) by lysis. In 48 (12 per cent.) cases the fall of temperature was atypical. After the crisis the urine becomes more abundant, richer in urea. The chlorides that have been much di-

minished or even absent during the disease are increased. The toxicity of the urine likewise undergoes a rapid modification. According to Rayer and Gaume (*Revue de Med.*, 1889) this during the attack is below normal, but, when the crisis occurs, it increases markedly in toxic powers. Possibly the sweat also becomes toxic and contains effete products. The leucocytes, that during the attack are increased in number, (a marked leucocytosis being a favorable prognostic sign) suddenly return to normal.

The exudate in the lung rapidly disappears by absorption. None is coughed out.

Flexner has found a leucocytic ferment which rapidly autolyzes the leucocytes of the exudate and renders them easily absorbable by the blood and lymph. Even after the crisis virulent pneumococci can be proven from material obtained by puncture of the lung, although most cultures from the consolidated lungs of cases of lobar pneumonia showed a rather low grade of virulence. (Park and Williams). Most pathologists believe that the crisis is brought about by a neutralization of the pneumotoxin by anti-pneumotoxin. It is probable that the leucocytes play some part in bringing this about.

Tchistovitch, (*Annales de l'Inst. Past.*, 1904) thinks that active phagocytosis by the leucocytes is the important factor. Pneumococci not only grow in immune serum but retain their virulence. He has found that in cases that recovered there was active phagocytosis whereas none was observed where there was a fatal termination. At the time of the crisis the blood of the patient has no bactericidal properties. He would explain the crisis by the engulfing of enormous numbers of cocci in the diseased lung by the leucocytes. The parts played in the defense of the host by the agglutinins, antitoxines and other substances are secondary.

The fatal termination in lobar pneumonia can be referred to two causes, either (1) respiratory insufficiency terminating in asphyxiation or in exhaustion of the respiratory centre, or (2) circulatory insufficiency which leads presumably to accumulation of the toxic agent, and which may induce oedema of the lungs, or end in exhaustion of the heart muscle. In the majority of cases the respiratory function suffers most from the action of the toxic agent, and the deficiency in O and the accumulation of CO<sub>2</sub> in the blood asphyxiates the patient.



## TREATMENT OF PNEUMONIA.\*

BY W. G. MOORE, M. D., ST. LOUIS.

Unfortunately we inherit the fallacies as well as the facts of our predecessors in all the walks of life. It is particularly true and particularly regrettable in the practice of a vocation where we deal with the lives of men. Remembering the bad practice which I have seen and which exists today in many quarters, I am constrained to write of the "don'ts" rather than of the "dos" in the treatment of pneumonia.

That it ranks first of the acute diseases as a life destroyer is sufficient excuse, were any needed, for making an honest effort to solve the problem of the most beneficial treatment in this affection. It is susceptible of more harm being done in a short time by injudicious measures than any other disease I know of, and in the shortest possible time. The amount of good to be accomplished by proper treatment is certainly great.

We are dealing with an acute infection whose pathological condition from the very beginning diminishes the actual breathing space in the lungs by filling the air vesicles with plastic exudate, and at the same time the toxic effect of whose presence is overwhelming the vital centers. Thus the oxygen by which we live is limited and the heart by which it is distributed is enfeebled in its functional office. The micro-

organisms causing this pathological state have a definite period of activity lasting ordinarily from three to ten days—generally about eight days. A crisis marks the cessation of their invasion. We are therefore limited to from four to eight or nine days to do what we deem best for the relief of pneumonia, provided it runs an uncomplicated course. Clearly the task before us is to eliminate the toxins as quickly as possible and restore the pulmonary vesicles to their integrity.

Until we have an antidote either in the form of a serum or a drug which will destroy the bacteria and stop the pathologic and toxic progress, we must depend upon our ability to reinforce the constitution of the affected persons so as to enable them to outlive the unwelcome invaders of disease. How shall we do this? First, by making the hygienic conditions as good as possible, let in all the oxygen and sunshine we can, and use pure water internally, externally and eternally, as the best antipyretic, the best diuretic as well as the best diaphoretic and eliminant known to us.

The feeding of toxic patients is indeed an art, the great importance of which, I fear, is not fully appreciated amid the ceaseless din made by the commercial venders, as they cry aloud the virtues of some canned

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\*Read before the St. Louis Medical Society, meeting of March 3, 1906.

or bottled preparation of food that is but a delusion and a snare to the feet of the unwary. Why should any man advocate some prepared form of beef, when the fresh meat can be made into soups or served as desired? Is any form of albumen superior to the fresh egg? Or can milk be treated in any way to increase its efficiency over its fresh, pure form? Given meat, eggs, milk and farinaceous food, in the form of good bread, you have the real pillars of nutrition and, when supplemented by alcohol, *all* that is necessary for the support of pneumonia or other septic conditions.

It is in the judicious use of these remedies, both as to quantity and time of administration, that much of their value lies. Many patients through injudicious nursing are so over-fed by the direction of the attending physician that they are robbed of sleep and their respiration further embarrassed by the upward pressure of an over-distended stomach. How often have we seen the discharges filled with quantities of curdled milk and yet the stuffing process which brought it to pass went on unabated.

A good trained nurse is invaluable in the treatment of pneumonia, one whose judgment recognizes the good and bad effects of the proper or improper use of foods, and whose sympathy and perception are equal to the task of keeping the mental as well as the physical hygiene of the patient at the best possible status. The depressing effects of long-faced, whispering visitors, supplemented by darkened rooms and poor air, cannot be overestimated as depress-

ing factors in the disease. Cheerfulness, hopefulness and sunshine are great aids to living, both in disease and in health, in animals as well as in men. So much for the hygiene and feeding of pneumonic patients, which represent the best part of the treatment for their relief.

Now, as to medicinal agents and others. How stale, flat and unprofitable would it be should I consume your time and try your patience by recounting the manifold treatments of the so-called distinguished men and self-constituted authorities who have written so dogmatically upon the treatment of pneumonia and pointed with pride to statistics which were due more to the type of disease prevailing than to anything advocated in the treatment.

It is not of such that I care to speak, except to point a moral, but rather of the clinical masters of to-day, and of them very briefly. Without exception, so far as I remember, the best clinicians agree as to the value of strychnin, digitalis and strophanthus, as well as nitroglycerine for their sustaining powers on the heart. They are all likewise agreed as to the unsatisfactory results from antitoxic sera up to the present time, and I believe my statement is within the bounds of truth when I say that a large majority of representative clinicians recognize the food value of alcohol in pneumonia as well as in other acute infectious diseases, while they deprecate the use of the large depressing doses formerly resorted to and held to be curative by some of the afore-said authorities.

Testimony similar to that which was once accorded alcohol is now being thrust upon digitalis. Osler quotes Pêtresco who gave one to two drachms of the powdered leaves at a dose and claimed that these colossal doses shortened the duration and diminished the mortality of the disease. Personally I expect digitalis as a therapeutic factor in pneumonia to meet the same fate as alcohol, i. e., to preserve its place as a valuable aid in sustaining the heart, but lose all pretensions as a specific.

As regards the use of oxygen gas, Osler doubts its real value. The work of Lorrain-Smith indicates that under certain circumstances it may be positively harmful. He has shown experimentally that actual inflammation of the lungs may be produced by the inhalation of this gas. Anders, on the other hand, says: "Oxygen, if freely used, often serves to tide over periods of marked cyanosis."

The pain of pneumonia as well as the cough is best controlled by the use of morphia hypodermatically,  $\frac{1}{8}$  to  $\frac{1}{4}$  grain, and the application of ice bags to the chest. It is rarely necessary to use it longer than the first forty-eight hours for either purpose, during which time no remedy is so useful.

Delirium should be treated by injections of small doses of morphia and the ice cap, as well as frequent sponging with cool or cold water while the same is given by the mouth freely.

Poultices—our time-honored friends—are to my mind detriments rather than aids to the recovery of

pneumonias. The fatigue and disturbance incident to their use are much dreaded by me, as I recall the half-conscious, cyanotic patient held by the arms, more dead than alive, awaiting the application of a remedy whose usefulness I do not recognize and whose scientific claims I cannot appreciate. Rest, absolute rest, body and mind, to the patient with pneumonia, is of the first importance.

To epitomize:—Pneumonia is a self-limited, acute infection, for which we possess no remedy approaching a specific. The best agents to support the heart are strychnin, digitalis and strophanthus in the order named. The best general stimulant, I believe, is coffee. The best anodyne, cough sedative and remedy for both thoracic and cerebral pain, as well as delirium, is morphia. Calomel, salines and the free administration of water as above indicated, and also by the subcutaneous injection of normal saline solutions are the best means for eliminating the toxines present.

In a few rare cases where the subject is unusually plethoric, venesection at the beginning of the attack is said to be useful in allaying the pain, relieving the dyspnœa and cerebral symptoms. Osler says it is more in vogue in recent years than for some time past and gives his approval to the use of it in suitable cases, yet I cannot believe there is any marked tendency to revamp this bloody practice. Anything which depresses the vital resources in pneumonia, as in every septic state, is to my mind contra-indicated.

I cannot leave this subject with-



out placing my hearty disapproval upon the criminal practice which obtained in the past few years with a certain class of physicians whom I will call antikamniaists—"afraid of fever"—who are always ready to resort to the use of these depressing coal-tar products to combat the fever and kill the patients. If there is an absolutely indefensible practice it is this, and I truly believe it has been the cause of many fatalities that would not otherwise have occurred.

What I have written applies to the treatment of lobar pneumonia without complications, which I take it was the scope of the subject assigned me.

#### DISCUSSION.

Dr. F. Neuhoff:—While I think the principles of the treatment as set forth by Dr. Moore will probably be agreed to, still I think our medical textbooks as well as our medical teachers are inclined to be too pessimistic in regard to the treatment of pneumonia. For the past fifteen years I have been in a position where I have had to treat thirty and thirty-five cases of pneumonia each year in one of the large hospitals here and we all know that among hospital patients the cases are of the worst class. So I may say I have had opportunity to see many cases of pneumonia in its worst form, where the treatment could be carried out in its strictest form. When I first undertook the treatment of these patients I was very much under the impression that Dr. Moore is now, i. e., that

there was nothing in particular to be done and perhaps, as Osler says, we are more apt to do harm than good. But I have somewhat changed my views. I don't think there is any specific, but there are general remedies. If we use carbonate of creasote, ten minims every three hours, for every patient with lobar pneumonia, together with the hygienic measures mentioned, I think the death rate will be decidedly lessened. I would like the gentleman to try this. I don't believe in giving it in an emulsion, but give it in capsules until the fever goes down and you will have better results. As far as stimulants are concerned, the most important thing is to know when to give rather than what to give. If given too early they do more harm than good. This is true particularly of digitalis. The safest of all heart remedies, safe because if you give it a little too early you will do less harm, is strychnine. I believe that at the first sign of weak pulse, you should give 1-30 of a grain every six hours, then every four hours, then every three hours, providing the increasing weakness of the heart demands it.

If strychnine alone does not control the pulse, I add to that, 10 minim doses of the tincture of strophanthus (old pharmacopeia). If the heart still need further stimulation, I give besides the above, also whiskey. The safest way is to start in with one dose and observe the patient. I give an ounce of whiskey and watch the patient, if his comfort is improved I know I am on the right track, and give a table-

spoonful every six hours and then increase that later if necessary. One important point I wish to speak of is bleeding. Most people think it is a good thing at certain times, but they don't do it. I venture to say that of the entire number of men here tonight not one in ten has bled a patient for pneumonia. One year I bled all those patients that I thought proper cases. It certainly relieves the symptoms, but as to the ultimate recovery I think it did not affect the statistics. The cold air treatment I have read of with interest. Dr. Northrup reported the case of a boy during the whole course of his pneumonia placed in a room at a temperature of 40° between two open windows. No medicine was given the boy, and he made a good recovery. At the Presbyterian Hospital in New York all the pneumonia patients are sent up to the roof for four to six hours a day. I have not tried that, for I can hardly convince myself that to put a patient into such a temperature cannot be dangerous. I would like to see further reports before trying it.

Dr. Victor A. Bles:—Some of the years I spent in Colorado I was at an altitude of 8,500 feet and some of my work was another 1000 feet higher. I have been much interested in the article written by Dr. Galbraith of his experiences in Mexico where he treats pneumonia by the use of large doses of quinine, the initial dose being 50 to 75 grains. I never tried that treatment but I wish I had, for they used to die like flies, as the lessened atmospheric pressure increased the internal pressure at such a tremendous rate. My

experience was that we could not give digitalis and it was the same with alcohol. The only stimulant we could give was strychnine. In fact, the indication was to depress rather than to stimulate the circulation. Oxygen did good where we could get it. I lived in a place where there was no nurse and not even a dentist, so you can imagine the assistance a doctor had in treating pneumonia. Down here we can follow a more expectant treatment but there one certainly could not sit still and wait.

Dr. K. W. Millican:—I have failed to find in any of the textbooks mention of a peculiar characteristic of the temperature in pneumonia, viz., the sensation to the touch resembling the feel of hot sand. My attention was called to this clinical feature during the course of my student days, I think by Sir William Broadbent. So marked has this character been in my experience that that symptom alone has more than once led me to suspect lobar pneumonia. On two occasions I bled a patient with considerable immediate relief. Both patients were very plethoric and the heart was greatly embarrassed. Both recovered; but, beyond warding off impending danger, I should not like to express an opinion on the influence of the venesection on the ultimate result.

Dr. Lemen:—One point I want to make in regard to Dr. Moore's treatment and that is his idea as to morphine. I think we should be very careful about giving morphine in a disease like pneumonia, where the vital forces are reduced, where the

respiratory center is likely to be sluggish, and therefore I believe that the administration of morphine is a dangerous proceeding in pneumonia. Other drugs will subserve the same purpose, quieting the pain and being less dangerous to the patient than morphine.

Dr. Moore:—What are they?

Dr. Lemen:—Bromide of sodium for instance.

Dr. John Zahorsky:—In regard to the etiology, I have observed many epidemics in children, especially in asylums. These epidemics often occur in asylums and in addition to pneumonia we have other affections of the air passages, otitis, coryza, bronchitis, etc. For many years I have been studying what other infections are found in families where there is pneumonia. I am convinced that this same pneumococcus may be found in the respiratory tract of other children suffering with bronchitis or some other infection. So it has occurred to me that possibly croupous pneumonia may be only an incident in a more or less wide-spread pneumococcus infection. I believe in that respect the histories of our cases are not complete. So it is erroneous to say that pneumonia is generally contagious; it is contagious but it would be more truthful to say that respiratory infections are contagious. We know that in health it is only in the upper air passages that the pneumococcus is found. Now, in these other children, in whom coughing is excessive, large numbers of the pneumococci may get into the lung and cause a croupous pneumonia. As to the treatment.

in infants and children it is the nutrition that counts. That does not mean that they should be given large quantities of food; we must find what they can easily digest and then give them only as much as they can digest. Again, those children fed on sterilized and canned foods have not the resisting power of those children fed on fresh eggs or milk. I would rather give a child much smaller quantities of fresh beef juice, eggs or milk given fresh, than large quantities of canned goods, such as the peptonized milk, etc.

Dr. J. H. Tanquary:—I agree with Dr. Moore's treatment in the main but think he might have put more stress on the early treatment. We are called in when the patient is vomiting, and has a temperature of  $103^{\circ}$  or  $104^{\circ}$  and I think we should first prepare the patient for stimulation by opening the bowels well. During the stage of congestion, with high fever, when the arterioles are contracted, an old remedy may be used to good advantage for a few hours. After moving the bowels well, after a few hours veratrum viride will dilate the arterioles and allow the blood to escape from the congested lungs. Of course, this is an old remedy and we are inclined to pay but little attention now to old remedies. I have seen good results from thirty and forty grain doses of quinine and I think I have checked the progress of the disease by giving this remedy. I agree with Dr. Lemen in the main that morphine should not be given recklessly, but I believe with Dr. Moore that the pain may be allayed by a small dose of morphine occasionally



and the patient greatly benefitted by a few hours of rest.

- Dr. A. R. Kieffer:—It is a very sad commentary on our methods that the mortality of this disease increases with the advance of knowledge in medicine. The mortality being 20 to 25 per cent. in the hospitals, where there is the greatest knowledge and the best opportunity for putting this knowledge into practice. I remember that in the country where malaria was common there was a great fatality among pneumonia cases. It was a common practice there to begin our treatment of pneumonia cases with malarial treatment. The patients are taken suddenly, with a full alimentary canal. I gave first a large dose of sulphate of magnesia, which had practically the same result as freely bleeding the patient, and I followed this up with large doses of quinine. Pain is a prominent symptom of the first stage. It is not prominent after the stage of hepatization. There is no harm in giving morphine cautiously in the early stage. It was my habit to use a many tailed bandage in the early stage, but I do not believe it would be advantageous in the later stages. As to expectoration, many patients do not expectorate at all. In cases where it is marked the objection to morphine is the blunting of the sensibility, preventing the cleaning out of the bronchi leading to healthy lung.

One point I would like to have some light on and that is the question of stimulating the heart. The greatest skill in the treatment of pneumonia is needed right here. Take, for example, a driver who be-

gins to whip his horses at the foot of the hill. The team is exhausted before he gets to the top. I think it is better to watch the heart and as long as it is able to carry the load don't stimulate it, but when it begins to lag stimulate. Right here is where I think many practitioners make mistakes. Many a patient dies because his heart is whipped to death. I don't know what the mortality is in the country but it is small except in the extremes of life. As to the spread of the infection, I think those sulci are put in the lungs to prevent the spread of the disease. But in the grip type of pneumonia there is little attention paid to these sulci in the spread of the infection. As to its contagious character, I remember one family in which three members had the disease at the same time. I knew of a family having eight cases of grip at same time. In one family a child had an attack of acute lobar pneumonia, then the mother, and later the father. In another instance a man had pneumonia, then his son and his son's wife, and all three died.

Dr. E. C. Gehrung.—I have listened to these three most valuable papers with the greatest interest. We may feel proud of the progress that has been made in the symptomatology, pathology and treatment of this protean disease. Strange to say however, that the mortality has not lessened, but seems to have increased *pari passu* with the progress of science. This would point to the need of a little less science and a little more common sense.

Whatever the kind of pneumonia and whatever the pathology, wheth-

er septic or not, certain indications for treatment constantly present themselves. Free expectoration, relief of pain, aeration of the blood, sleep and rest, reduction of temperature, nutrition to keep up the strength of the patient to resist the disease and to prevent if possible the unpleasant and dangerous sequelae. These are to my understanding the indications for a successful treatment of pneumonia. Besides the treatment indicated in the papers read to-night, to reach this result, there is one means, which, without interfering with the others, will meet every one of the aforementioned indication. Forty-two years ago, when assistant at the merchant marine hospital, I had good opportunity to observe how pneumonia patients on waking up clutched their chest to relieve the pain of unguarded breathing and coughing, and I wondered whether something could not be done to overcome this suffering, by mechanical or automatic means. Later, when in private and general practice I encountered plenty of opportunity to bring my idea into execution with most satisfactory results. My treatment was as follows:

Strip the patient's chest, wash, dry and oil it, cover it with a thick layer of (preferably the best quality of unabsorbent) cotton, from the axilla to the lower edge of the ribs and over the shoulders, to keep up an even temperature, then cover the whole by a circular bandage, either a broad towel or a strip of drilling or sheeting fastened like the obstetric binder, or scultetus or roller bandage, or adhesive plaster, no

matter what substance be used, so long as you strap the chest so tightly that all costal movement be arrested and diaphragmatic breathing be substituted for the thoracic. To do this it requires a considerable amount of force, to use which many lack the courage and thus defeat the very purpose for which the bandage is applied. Care must be taken that the bandage be applied along the line of the tenth rib to the sternum in front so as to leave the scrobiculus cordis free for the abdominal respiration. The bandage should be pinned in backstitch fashion with large safety pins and shoulder straps should be pinned or sewed to it to prevent it from slipping down. Whenever the bandage becomes loose and consequently all the symptoms return, it should be tightened again. The effect of this, as the chest walls do not give, is free and painless expectoration since every diaphragmatic succussion drives the contents of the respiratory tract to the surface whether septic or otherwise, thereby almost certainly avoiding the chance of infecting the well side, by preventing regurgitation into the healthy bronchi. The air can now come freely in contact with the respiratory surface. Breathing or coughing can take place, free of pain, since the chest can not expand to the pain limit and the additional irritation of the diseased tissues is thus prevented. The septic mucous will be promptly removed instead of having every chance to accumulate, propagate and re-infect the tissues with which it is in contact.

The pain being allayed, the respiratory tract cleared and as a rule the

temperature diminished, sleep can now be enjoyed without the fear of waking up in pain or suffocation. The appetite will soon return and give the patient additional strength to battle with the disease. Unless the chest is strapped to the extent of completely preventing the costal movements the bandage is useless. Many will lack the courage to accomplish the desired result, "because it appears so cruel to use the necessary strength," or "because they are afraid of limiting the breathing space, where the patient is already struggling for air." This is however false reasoning, as the preceding explanations will clearly show.

Reasoning from a limited experience during later years, as the exclusive practice of gynecology will necessarily do, I believe that under this "bandaging of the chest"—which acts much like a surgical splint to the diseased organ in addition to whatever other means be desired or desirable that at least fifty per cent. more recoveries would take place than under the present treatment. I also believe the se-

quelae, like hepatization, perforation, pleuritic effusions, etc., would be largely avoided and the duration of the disease greatly abbreviated.

I shall state here that I have never lost a case of pneumonia since the use of this bandaging where I was called before the patient was moribund, that I have never had the occurrence of a miscarriage when the patient was in advanced pregnancy, contrary to what happens to others and contrary to what happened to me before the chest bandage was used; that a few cases with double pneumonia during labor at term made an excellent recovery under much reduced suffering. Those who have, under my direction honestly and fully tried this my plan of treatment have reported equally favorable results.

The pain in pleurisy is almost always and immediately allayed by my "chest bandage." It usually renders all other treatment superfluous in this disease. At the same time it generally prevents the occurrence of the so much dreaded sequelae.



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## EDITORIAL.

### SALUTATORY.

With this number, the Journal of the Missouri State Medical Association closes its second volume. During the past year, twelve numbers have appeared with an average of 74 reading pages. Not only has the Journal published the transactions of the Association, which included all papers read at the Excelsior Springs meeting, but many articles or abstract of articles from the affiliated societies. Altogether 81 editorials, 215 county society notes, and 82 original articles have appeared. One fact has been demonstrated to the medical men of the State, that is the value of the STATE JOURNAL in organizing and cementing together the medical profession of Missouri. Two years ago there were 1,221 paid members: 1905, 1,602 paid dues and 1906 will show a gain of more than 400 members. Beginning next year the JOURNAL may be published at one-half the present cost and after three years will be self-supporting. The success of the JOURNAL should be a source of satisfaction to all members of the Association.

### ANNUAL MEETING.

The forty-ninth Annual Session of the Missouri State Medical Association was held May 15th, 16th, 17th, at Jefferson City. The weather was perfect, sky was clear, and the temperature very comfortable. The attendance proved to be a large one and both the House of Representatives and the Senate Chamber were well filled. The House of Delegates and Judicial Council met Tuesday morning at 10:30 o'clock, and the entire day was spent in routine business, calling of the roll was followed by the report of Committees on Medical Education, Arrangement, Scientific Work, Public Health and Legislation and Publication Committee, also report of Treasurer, Secretary, and appointment of Nomination Committee. On Wednesday morning the Medical and Surgical Sections held their first meeting and commenced the discussion of papers. The idea of having the work of the association in sections has been demonstrated to be a success. It not only enabled the Committee on Scientific Work to present a large num-

ber of papers to be read and discussed, but enabled those gentlemen in attendance to spend their time in the section of special interest to them. The address of the President by Dr. D. C. Gore, address on Medicine by Dr. W. G. Moore, and address on Surgery by Dr. C. H. Wallace were delivered Wednesday evening at the general session. Jefferson City was decided upon as the next place of meeting and the decision was doubtless a wise one. The railroad facilities are good, hotel arrangements quite satisfactory and there was little dissatisfaction expressed either as to the accommodations or their cost. The local profession entertained royally. The reception Monday evening, supper Tuesday evening at the Penitentiary reception later during the same evening at the Governor's mansion, and Wednesday evening a drive over the city to the park where luncheon was served, were all most enjoyable. However, in future the local profession should not be asked to carry the burden of entertainment, but the entire expense should be borne by the association.

#### BARRY COUNTY.

Since our last issue the Barry County Medical Society has been organized with the following officers and members: President, Dr. Wm. M. West; Vice-President, Dr. J. M. Russell; Secretary-Treasurer, Dr. D. L. Mitchell; Delegates, Drs. D. E. Miller and A. S. Hawkins; Board of Censors, Drs. L. B. Northcut, R. B. Gladden, and M. R. Trumbower; Members, Drs. W. M. West, Monett;

D. L. Mitchell, Cassville; J. M. Russell, Monett; A. S. Hawkins, Monett; L. B. Northcut, Washburn; R. B. Gladden, Monett; D. E. Miller, Monett; M. R. Trumbower, Monett.

#### ST. FRANCOIS COUNTY.

We have to report the organization during the past two weeks of the St. Francois County Medical Society with the following officers and members: President, Dr. J. L. Hou; Vice-President, Dr. L. A. Anthony, Secretary, Dr. A. L. Evans; Treasurer, Y. L. Haney; Delegate, Dr. F. L. Keith; Board of Censors, Drs. M. B. Barber, G. B. Perkins, H. M. Topping; Members: Drs. A. L. Evans, Bonnetterre; F. L. Keith, Flat River; M. B. Barber, Flat River; G. B. Perkins, Elvins; A. Marshall, Bonnetterre; C. P. Posten, Bonnetterre; I. N. Shannon, Knob Lick; J. L. Hou, Farmington; L. A. Anthony, Bonnetterre; T. L. Haney, Flat River; H. M. Topping, Flat River.

#### DENT COUNTY.

The latest addition to the list of Medical Societies was organized by Dr. R. L. Johnson, of Rolla, Councillor of the sixteenth district, with the following officers and members: President, Dr. A. F. McMurtrey; Secretary and Treasurer, Dr. J. C. Welch; Delegate, Dr. W. E. Rudd; Board of Censors, Drs. L. B. Craig, E. A. Duncan, W. E. Rudd; Members: Drs. A. F. McMurtrey, L. B. Craig, E. A. Duncan, W. P. Cummings, W. E. Rudd, J. C. Welch, of Salem; H. H. Brown, Condray; W. M. Leonix, Hobson; E. Y. Pare, Sligo; J. B. Gordon, Gila.

## THE BOSTON MEETING.

The fifty-seventh Annual Session of the American Medical Association will be held in Boston on Tuesday, Wednesday, Thursday and Friday, July 5, 6, 7, 8, 1906. The Committee on Transportation announces reduced rates on all railroads for the Boston Session. From Missouri one fare, plus one dollar for the round trip. A number of distinguished medical men from abroad will address the different sections. Among others may be mentioned: Geo. Hofrat, Prof. von Rosthorn, Heidelberg, Germany; Prof. Dr. Dührssen, Berlin, Germany; Dr. Wesley A. Mills, Montreal, Canada; Dr. Max von Frey, Physiologisches Institut, Würzburg, Germany; Prof. Max Joseph, Berlin, Germany; Herr Geheimrat Prof. F. Trendelenburg, of Leipzig, Germany. A special train will be run over the Chicago and Alton, the Grand Trunk and the Boston and Maine Railroad, certain cars of which will leave Kansas City and St. Joe, May 31st. The afternoon of the first day will be spent in Chicago and the departure over the Grand Trunk will be at 4 P. M., on a special train, arriving at Boston, June 4th, morning. This trip includes a stop at Niagra Falls, a boat trip down the St. Lawrence river, through the Thousand Islands and runs through the famous Green Mountain scenery. This will be known as the Missouri Valley Special.

## STATE ANATOMICAL BOARD.

The Annual Meeting of the Missouri State Anatomical Board was

held May 17th, at Jefferson City. Election of officers resulted as follows: President, Dr. C. M. Nicholson, St. Louis; Vice-President, Dr. Howard Hill, Kansas City; Secretary, Dr. J. M. Jackson, Columbia, Mo.; Treasurer, Dr. A. R. Keiffer, St. Louis. The next annual meeting will be held at Jefferson City.

## UNTAXED ALCOHOL.

THE HOUSE COMMITTEE on Ways and Means decided, on March 30, by a vote of sixteen to two, to report favorably a bill abolishing the internal revenue taxes on "denaturalized alcohol"—that is, alcohol made unfit for use as a beverage. Wood alcohol is already free, and the proposition is to take off the taxes from ordinary alcohol so prepared as to be fit for nothing but use in the arts. The hearing before the committee disclosed surprising industrial possibilities in this direction. The tax on alcohol is now \$1.10 per proof gallon, which makes from \$1.98 to \$2.11 per gallon of the commercial article. Untaxed, the cost would be from fourteen to twenty cents per gallon. An acre of corn could be made to produce about one hundred and seventy gallons of commercial alcohol, of which one hundred gallons would be obtained from the stalks, which now go to waste. An acre of potatoes could yield five hundred gallons of alcohol. It is now possible to make a brilliant light from alcohol with an incandescent mantle, and if that alcohol were untaxed it would be cheaper in a large part of the country than kerosene. It would be a boon to the farmer, who would heat



and light his house and run the power plants of his farm with the waste products of his fields. It would furnish a substitute for the rapidly diminishing supply of gasoline for automobiles and motor boats.. It would run traction engines to replace horse-power in plowing and

reaping. It would revolutionize dozens of manufacturing industries, while opening a new and unlimited home market to the farmer. It is no wonder that even a "stand pat" Congress seems inclined to try the experiment of removing taxes in this case. (*Colliers Weekly*).

Following is a list of members registered at the Jefferson City meeting:

Adcock, J. A. B.  
 Alexander, W. J.  
 Alder, A. Eugene  
 Allee, E. M.  
 Allee, G. D.  
 Allee, W. S.  
 Allen, F. W., Sr.  
 Allen, J. M.  
 Allen, T. C.  
 Allison, Nathaniel  
 Amerland, J. H.  
 Anderson, Jas. I.  
 Anderson, John  
 Anthony, F. R.  
 Atkins, Calvin  
 Austin, M. B.  
 Babler, E. A.  
 Bailey, W. S.  
 Baker, N. F.  
 Baker, J. H. T.  
 Barclay, Robert  
 Barger, J. N.  
 Bartlett, Willard  
 Bayliss, W. M.  
 Baysinger, S. L.  
 Bedford, S. V.  
 Peedle, Gordon A.  
 Bell, W. E.  
 Bell, W. T.  
 Berrey, R. W.  
 Bingham, J. W.  
 Blakesley, T. S.  
 Bogart, T. N.

Bonham, V. Q.  
 Booth, D. S.  
 Boulware, T. C.  
 Bowline, B. F.  
 Braecklein, W. A.  
 Bramel, H. W.  
 Briegleb, C. F.  
 Broome, G. Wiley  
 Brown, A. C.  
 Brown, John E.  
 Brown, S. M.  
 Brown, Tinsley  
 Buchanan, J. Robert  
 Buckwalter, J. C.  
 Buren, Chas. R.  
 Burke, Jno. P.  
 Cadwallader, I. H.  
 Cadwell, Victor  
 Callaway, L. H.  
 Campbell, A. J.  
 Campbell, O. Beverly  
 Cave, E. S.  
 Chapman, A. W.  
 Chastain, C. H.  
 Chastain, M. T.  
 Chastain, O. N.  
 Child, Scott P.  
 Chowning, Thos.  
 Christian, C. H.  
 Clark, W. A.  
 Cline, W.  
 Clopton, M. B.  
 Cochran, O. W.

Coffey, W. H.  
Coil, Paul E.  
Cole, H. B.  
Colson, J. R.  
Cook, F. L.  
Cook, T. B.  
Craig, T. B. M.  
Crawford, R. O.  
Cross, R. O.  
Crossen, H. S.  
Crowson, Egbert  
Crowson, E. L.  
Crum, J. A.  
Dallas, L. W.  
Dalton, H. C.  
Davis, J. R.  
Davis, S. O.  
Davis, T. O.  
Dawson, J. W.  
Dearing, W. A.  
DeVilbiss, E. F.  
DeVilbiss, Frank  
Dixon, C. H.  
Dorsett, Walter B.  
Downing, T. J.  
Drake, N. A.  
Dunaway, L. T.  
Elam, W. T.  
Ellis, Frank B.  
Enloe, C.  
Enloe, I. N.  
Ettmueller, Gustav  
Evans, R. L.  
Farrington, O. P.  
Fassett, Chas. Wood  
Ferguson, A. D.  
Ferguson, W. J.  
Frankenburger, J. M.  
Frick, W. J.  
Fulton, A. L.  
Fulton, F. H.  
Freudenberger, H. C.  
Funkhouser, Robt. M.  
Geiger, Chas. G.  
Geiger, Jacob

Gleaves, O. G.  
Goldman, Max  
Goodier, Robt. H.  
Goodson, H. C.  
Goodwin, E. J.  
Gore, D. C.  
Gosney, C. W.  
Graham, J. K.  
Gray, A. L.  
Graves, Wm. W.  
Green, John, Jr.  
Greene-Wilson, Dora  
Greeson, G. A.  
Griffin, J. M.  
Griffith, J. D.  
Grindon, Joseph  
Gum, P. D.  
Gunn, A. J.  
Haire, Robt. D.  
Hale, Jos. M.  
Hall, C. Lester  
Hall, Frank J.  
Hall, T. B.  
Hamel, A. H.  
Hamel, Geo. F.  
Hamlin, C. W.  
Hampton, J. R.  
Harris, James A.  
Harris, J. E.  
Harrison, J. F.  
Hatter, W. L.  
Hawkins, G. W.  
Heckman, S. P.  
Heddens, J. W.  
Henderson, F. L.  
Hendrix, M. B.  
Hertzler, A. E.  
Hill, Jas. A.  
Hill, Roland  
Homan, George  
Hopkins, Thos. A.  
Hough, C. P.  
Howard, F. A.  
Hughes, Marc. R.  
Hypes, B. M.

English, J. E.  
 Jackson, C. M.  
 Jackson, Jabez N.  
 Jensen, N. N.  
 Jerard, H.  
 Jende, Julius J.  
 Johnson, E. W.  
 Johnson, R. L.  
 Johnson, Wm. E.  
 Jones, A. L.  
 Jones, W. G.  
 Jurgens, H.  
 Kelso, R. S.  
 Kennedy, J. J.  
 Kennedy, W. U.  
 Kenney, W. L.  
 Kepner, Jno. W.  
 Kieffer, A. R.  
 King, Geo. A.  
 Kouns, D. H.  
 Kuhn, Wm. F.  
 Lamkin, W. M.  
 Lanier, L. H.  
 Latham, H. W.  
 Latham, L. L.  
 Leach, H. T.  
 Leonard, P. I.  
 Lichtenberg, J. S.  
 Lightfoot, Frank  
 Lockwood, T. F.  
 Loeb, H. W.  
 Logan, James E.  
 Long, J. M.  
 Lopp, J. E.  
 Lowrey, E.  
 Loyd, T. B.  
 Lutman, H. N.  
 Lutz, F. J.  
 McAlester, A. W.  
 McAlester, A. W., Jr.  
 McCandless, W. A.  
 McComb, J. A.  
 McComb, J. L.  
 McDonald, H. A.  
 McGuire, M. S.  
 McKinley, W. E.

McLemore, T.  
 McMurry, M. C.  
 McNutt, W. B. A.  
 Mann, A. W.  
 Mann, F. W.  
 Manning, D. F.  
 Mark, E. G.  
 Martin, J. B.  
 Matthews, J. C.  
 Meredith, A. L.  
 Meyer, L. A. T.  
 Milam, B. J.  
 Miller, E. H.  
 Miller, E. M.  
 Millican, Kenneth, W.  
 Mills, O. P. M.  
 Mills, S.  
 Mitchell, C. A.  
 Mitchell, Wm. F.  
 Monroe, A. E.  
 Moore, Geo. M.  
 Moore, J. W.  
 Moore, Roy D.  
 Moore, Wm. G.  
 Morfit, J. C.  
 Morrow, W. F.  
 Morton, Daniel  
 Mosby, C. V.  
 Moss, Woodson  
 Murphy, Franklin E.  
 Murray, L. F.  
 Musson, E. H.  
 Myer, Jesse S.  
 Neff, Robt. L.  
 Nicholson, C. M.  
 Nifong, Frank G.  
 Norman, J. B.  
 Norwine, J. J.  
 Norwood, W. W.  
 Orrick, G. W.  
 Orr, Chas. J.  
 Overholser, M. P.  
 Owens, J. H.  
 Patterson, W. R.  
 Pearse, H. E.  
 Pipkin, W. D.



Pitman, J.  
Pitts, Barton  
Platter, A. E.  
Porter, D. R.  
Porter, Wm.  
Porterfield, E. P.  
Porth, J. P.  
Potts, Jerome D.  
Prentiss, H. S.  
Punton, John  
Ramey, R. D.  
Rea, Robt. W.  
Redman, Spence  
Reid, H. L.  
Reynolds, A. C.  
Reynolds, E. M.  
Reynolds, S. H.  
Rigdon, Thos. J.  
Roberts, C. F.  
Robinson, J. F.  
Robinson, John L.  
Rodes, N. R.  
Rogers, J. C.  
Roseberry, E. C.  
Rowell, H.  
Rudd, W. E.  
Ryland, C. T.  
Sampson, J. H.  
Sands, M. L.  
Seba, John D.  
Seybold, Ira W.  
Schauffler, R. McE  
Scherck, H. J.  
Schlueter, Robt. E.  
Schmid, W. F.  
Schneider, J. A.  
Schutz, Robt.  
Schutz, W. H.  
Shelton, C. W.  
Shy, M. P.  
Smith, Jas. W.  
Son, E. R.  
Songer, H. E.  
Soper, H. W.  
Stauffer, W. H.  
Stone, A. B.

Stratton, C. D.  
Stuart, James  
Talbot, Hudson,  
Tanner, W. C.  
Teel, S. M.  
Thompson, W. S.  
Thorpe, Alonzo V.  
Thorpe, J. L.  
Thrailkill, E. H.  
Tiffany, Flavel B.  
Todd, L. A.  
Todd, T. B.  
Townsend, W. H.  
Triplett, J. S.  
Trippeer, Bert  
Tucker, A. J.  
Tupper, Paul Y.  
Vandivert, A. H.  
Van Hoefen, S. A.  
Van Ravenswaay, C. H.  
Vonspecht, J. A.  
Wallace, C. H.  
Wallace, W. S.  
Walter, F.  
Walton, J. H.  
Warfield, Louis M.  
Webb, W. C.  
Welch, J. F.  
Welch, W. A.  
Well, Wm.  
White, J. A.  
Whittington, Wm.L.  
Williams, D. B.  
Williams, P. E.  
Williams, V. A.  
Winningham, W. H.  
Wilson, G. S.  
Witherspoon, T. C.  
Wood, E. A.  
Wood, N. P.  
Woodson, C. R.  
Wright, U. S.  
Yates, Martin  
Zellman, A. W.  
Zwart, B. H.

## COUNTY SOCIETY NOTES

## BARTON COUNTY MEDICAL SOCIETY.

The regular quarterly meeting was held at Liberal on February 8th. Drs. C. A. Smith, J. S. Gish and J. W. Clark, of Liberal, were elected to membership. Dr. R. J. Fletcher was elected an honorary member.

Dr. A. van Meter read a paper on "Incipient Bright's Disease." Dr. Allee read a paper entitled "Arthritis". Dr. J. K. Cole presented a paper entitled "Incipient Delirium Tremens," and Dr. W. A. McKelvey chose the subject of "Gonorrhoeal Rheumatism."

A vote of thanks was tendered the physicians of Liberal for the generous entertainment prepared for the members of the society.

J. L. McCOMB, Secretary.

## HARRISON COUNTY MEDICAL SOCIETY.

The quarterly meeting was held at Bethany on April 17th. Dr. Jacob Geiger, of St. Joseph, read a paper on "Peritonitis". Dr. J. H. Morrow read a paper entitled "Liberty Considered in a Reflective Mood". Dr. Eades reported a case of traumatic injury to the lumbar region.

The next meeting will be held at Bethany on July 17th at which time officers for the year will be elected.

W. H. WILEY, Secretary.

## NODAWAY COUNTY MEDICAL SOCIETY.

At the regular meeting held May 8th papers were read as follows:

"The Minister and the Doctor", by Rev. Homer M. Cook; "The Lawyer and the Doctor," by Hon. John M. Dawson; "The Editor and the Doctor," by Hon. Chas. J. Calden; "The Pharmacist and the Doctor", by Mr. E. G. O'Rear.

Dr. L. E. Dean reported a case of fissure of the tongue, and Dr. Howell reported a case of cystitis.

The following committee were appointed: Arrangements, Drs. H. L. Saylor, W. P. Stuckle and H. C. Goodson. Legislative, Drs. Geo. Nash, R. M. Brandenberger and E. L. Crowson. Entertainment, Drs. L. E. Dean, Chas. Ellis, J. H. Todd.

The following applicants were elected to membership: Drs. Egbert Crowson, Gaynor City; John Gomer, Wilcox; E. T. Molyalm, Ravenwood; D. G. Smith, Arkoe; J. B. Robinson, Quitman.

An amendment to the by-laws was adopted making the meeting held in January the annual meeting at which time officers for the year shall be elected.

H. L. SAYLER, Reporter.

## PLATTE COUNTY MEDICAL SOCIETY.

At the regular monthly meeting held May 2nd in Platte City, the subject of "Valvular Lesions of the Heart" was taken up for general discussion. This was followed by an informal discussion of "Anti-rheumatics".

Resolutions were adopted requiring that a uniform fee of \$5.00

be charged for making examinations of applicants for life insurance.

The next meeting will be held on the first Wednesday in June.

G. C. COFFEY, Reporter.

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### ST. GENEVIEVE COUNTY MEDICAL SOCIETY.

At the regular monthly meeting held May 9th, Dr. Rutledge addressed the Society on the subject of Sanitation as Affecting the Prevalence of Typhoid Fever. He also reported two fatal cases of typhoid fever.

On motion Dr. M. Andre, ex-president of the society, was elected honorary member.

The next meeting will be held on the second Wednesday in June, at 8:30 a. m.

R. W. LANNING, M.D., Secretary.

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### CASS COUNTY MEDICAL SOCIETY.

The bi-monthly meeting was held at Harrisonville on May 3rd. Interest in the meetings is growing steadily and the attendance of members is increasing. Our president, Dr. Farrell, has not missed a meeting and the three members of the board of censors always in their places.

Our county representative, the Hon. W. P. Houston, was present at this meeting and gave a most interesting talk on the subject of medical legislation. He pointed out the absolute necessity of presenting a bill at the beginning of the session, having it introduced in both branches of the Assembly simultaneously, and having delegates on the spot if we

desired to see the bills which may be introduced become laws. He said he recognized the chaotic condition which caused medical legislation to go floundering about and pledged his support of measures looking to the betterment of the practice of medicine in Missouri and for the punishment of shameless medical quacks.

A vote of thanks was tendered Mr. Houston for his interest and promise of co-operation.

Dr. Ed. Schoor read a paper on "Primary Suturing of the Cervix." This was one of the best paper that has been read before this society. The discussion following the reading of this paper was full of interesting suggestions and compliments to the author.

At the July meeting the subject of a fee bill will come up for discussion.

Drs. Wm. Beckman of Strasburg and R. P. Yeagle of Pleasant Hill were elected to membership.

W. F. CHAFFIN, M. D., Reporter.

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### CLINTON COUNTY MEDICAL SOCIETY.

The society met in Plattsburg on May 1st with a fair attendance of the members. Dr. G. B. Rush reported the case of a patient who had suffered for some time with severe dysmenorrhea supposed to have been due to vaginal stenosis. The condition did not seem to improve under treatment. The patient did not seem to improve under treatment died in a short time from pulmonary tuberculosis.

At the next meeting, June 5th,



Dr. G. B. Rush will read a paper on "Opium" and E. A. Colley will read a paper on "Choice of an Anesthetic".

The next meeting will be held in Plattsburg.

E. A. COLLEY, M. D., Secretary.

### COOPER COUNTY MEDICAL SOCIETY.

The regular monthly session convened in Boonville on May 1st. Ten members were present.

Clinical cases were presented by Drs. Hurt, Smith, Taylor, Allee, Cochran and Lionberger. The cases and the discussion following proved full of interest and benefit to all.

The subject of a joint meeting of the Boone, Howard and Cooper county societies was considered and the secretary was instructed to write to the secretaries of Boone and Howard counties, inviting them to meet with the Cooper County at Chouteau Springs, Cooper County, on June 20. Dr. R. E. Fogle of Clifton City, was elected to membership.

The next meeting will be held on the first Tuesday in June.

JOHN R. LIONBERGER, M. D.,  
Secretary.

### DAVIESS COUNTY MEDICAL SOCIETY.

The attendance at the meeting in Gallatin, on May 8th, was rather small but interest was not lacking. Dr. Wetzel of Jameson, read a paper on: "Dysentery" which was freely discussed.

A clinical case of cancer of the

breast was presented by Dr. Minick of Lock Springs.

Dr. Frazier of Gallatin presented a case of phlegmonous erysipelas.

Dr. Smith was instructed by the society to investigate how we can get at the traveling quacks who travel over the country and fake the people.

Dr. Cox of Winston and Dr. Martin of Jameson were elected to membership.

The next meeting will be held on August 14th.

H. E. SONGER, M. D., Reporter.

### GASCONADE-MARIES- OSAGE COUNTY MEDICAL SOCIETY.

The Gasconade - Maries - Osage County Medical society met at Belle on April 26th. Eight members and five visitors were present.

The following applications for membership were received: Drs. O. C. Fritts, S. J. Terrell and Chas. T. Leach. Upon motion the rules were suspended and the ballot taken resulting in their election.

Drs. J. W. Burgess and O. C. Fritts each presented a patient. It was then moved to adjourn until 7:30 p. m.

At the evening session Drs. J. J. Ferrel, J. W. Burgess and Jno. Engelbrecht presented patients. Dr. W. E. Seba read a paper entitled "The Value of Vital and Mortuary Statistics and How They Should be Taken." Discussed by Dr. J. D. Seba.

Dr. J. D. Seba read a paper entitled "Surgical Intervention in Cerebral Apoplexy. With the Re-

port of a Case". Discussion by Drs. W. R. Ferrel, Engelbrecht, W. E. Seba, Spurgeon and Nieweg.

Dr. J. J. Ferrell reported "The History of a Case of Appendicitis".

The next meeting will be held at Meta.

J. W. NIEWEG, M. D., Secretary.

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### GRUNDY COUNTY MEDICAL SOCIETY.

The regular meeting was held in Trenton, on Tuesday, May 15th. This being the annual meeting, officers and committee made reports.

Dr. Winnigham presented a case of Carbuncle.

The election of officers resulted as follows: President, W. H. Addington, Spickards; vice-president, C. L. Webster, Trenton; secretary and treasurer, D. W. Coon, Trenton.

The retiring president made appropriate remarks for the betterment of the society and the medical profession in general. The newly elected president assured the society that he appreciated the honor of being elected president, and that he would always be found working for the betterment of the profession in general as well as the Grundy County Medical Society in particular.

The following committees were appointed: Committee on Medical Jurisprudence, Drs. Winningham, Wright and Sheldon; Committee on Arrangements, Drs. Asher, Fulkerson and N. E. Sutton; Committee on Scientific Communications, Drs. Davenport, G. A. Moore and Pitman; Committee on Medical

Education, Drs. Bertha Sutton, Allen and T. E. Moore.

On motion the following resolutions were adopted and the secretary instructed to notify all members of said action: That the members of the Grundy County Medical Society refuse to practice with or consult with any osteopathic physician, or *with any other physician who does consult or practice with any osteopathic physician*, under penalty of reprimand for the first offense and expulsion from the society for a second offense.

The next meeting will be held at Spickards on June 19th.

D. W. COON, M. D., Secretary.

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### HOWARD COUNTY MEDICAL SOCIETY.

At the meeting held in Fayette on May 4th, Dr. Moore presented a very interesting case of abdominal tumor, the probable diagnosis being cancer of the pancreas. Dr. Fleet presented a case of pruritis ani.

C. W. WATTS, M. D., Reporter.

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### KNOX COUNTY MEDICAL SOCIETY.

The regular meeting was held at Edina on May 7th. This meeting was the best one in the history of the society. Eight members were present and interest in the affairs of our county society seems to be constantly growing deeper and the members are becoming more enthusiastic.

Dr. H. F. O'Connor, of Baring, and Dr. R. E. Wilson, of Labelle, were elected members. Dr. J. R. Northcutt was chosen to represent this society at the meeting of the

North Missouri Medical Society at Moberly, and also to prepare a paper for that meeting.

Steps were taken to collect funds for the relief of physicians who suffered losses in the San Francisco disaster.

Dr. J. R. Northcutt read a paper entitled "The Management of Normal Labor and the Puerperium." The following members were appointed to read papers at the next meeting: Drs. F. E. Luman, R. E. Wilson, H. H. St. John, James Myers.

The next meeting will be held on the first Monday in July.

H. JURGENS, M.D., Sec.

#### NEWTON COUNTY MEDICAL SOCIETY.

Twelve members attended the meeting at Neosho, on May 8th. Interest in the meeting is growing steadily and we feel that much good is being derived by the members from their association in the county society. At this meeting Dr. W. A. Craven of Granby read a paper on "Scarlet Fever," and Dr. H. M. Mixer of Neosho read a paper on "Infant Mortality and Feeding." Dr. Mixer's paper is of such practical value that we hope it may appear in the State Journal.

HORACE BOWERS, M.D., Secy.

#### SHELBY COUNTY MEDICAL SOCIETY.

Pursuant to call, the Shelby County Medical Society met on April 20th. The subject of pneumonia was taken up for discussion, with special reference to large doses of quinine

as one of the salient features of treatment.

The question of preventing illegitimate traveling advertising doctors was discussed, the penalty not seeming to be sufficient to stop this practice. No definite action was taken.

H. C. VAUGHAN, M.D., Secy.

Pro Tem.

#### ST. LOUIS MEDICAL SOCIETY.

MEETING OF APRIL 21ST.

At this meeting the subject of criminal abortion was considered. The medical standpoint was presented by Dr. John M. Grant, the moral and religious aspects by the Rev. Jas. Sullivan, and Asst. Circuit Attorney Geo. N. Fickiessen discoursed on the legal phase. A very general discussion of the subject followed the reading of these papers. On motion a vote of thanks was tendered the essayists and those taking part in the discussion.

The committee on public health and legislation reported on the work that has been done and outlined the probable results of the crusade against advertising quacks, obscene medical advertisements, medical corporations, abortionists, etc.

Dr. M. W. Hoge presented a case of paralysis of the lower limbs due to fracture of the vertebrae.

The committee on elections reported favorably upon the following candidates and they were duly elected to membership: Jerome E. Cook, H. Robert Davis, Louis L. Guggenheim, Jacob A. Hartman, L. H. Hempelmann, W. C. Owen, M.



E. Poland, E. L. Sheahan, Robert J. Terry. Attendance: 153.

#### MEETING OF APRIL 28TH.

Dr. C. A. Weinsberg, 1531 S. 11th St., was elected associate member. Dr. O. L. Suggett read a paper entitled "The Possibilities of the *Spir-ochaeta Pallida*". Drs. Phillips, Fisch, Laidley and McConnell spoke on the subject in the discussion.

Dr. W. C. G. Kirchner presented a paper in which he described a case of pancreatitis relieved by operation.

Discussion on the subject of criminal abortion was renewed and the following members took part: Drs. Dorsett, Laidley, Scherck, Kieffer, Gehrens, Boisliniere, Forster, Fleming, Bryan and Grant.

Attendance, 77.

#### MEETING OF MAY 5TH.

The committee appointed to collect funds for the relief of the physicians in San Francisco reported that over \$800 dollars had been collected.

Dr. Geo. Gellhorn read a paper entitled "Dry Heat as a Factor in Gynecology". He also demonstrated a new apparatus for making the application. The paper was discussed by Drs. Shattinger, Blair and Ehrenfest.

Dr. L. T. Riesmeyer read a paper being a report of a case of hematosalpinx with rupture into the peritoneal cavity. He also presented a specimen of ovarian cystoma. Discussion by Drs. Dorsett and Kieffer.

#### MEETING OF MAY 12TH.

Dr. Jesse S. Myer read a paper on "Congenital Pyloric Stenosis". Dis-

cussion by Drs. Green, Warfield, Bles, Johnson, Martin, Sharp, and Barclay.

Dr. W. C. G. Kirchner reported a case of gastrectomy and presented the patient. Discussion by Drs. Kieffer and Moore.

Dr. L. M. Warfield read a paper on the "Origin of Renal Casts;" Diagnostic Significance and Value". A number of the members took part in the discussion.

#### MEETING OF MAY 19TH.

Dr. F. L. Henderson reported a case of hysterical binocular amaurosis.

The delegates to the annual meeting of the state medical association reported on the work done at the meeting in Jefferson City.

I. E. GRAHAM, M. D., Reporter.

### ST. LOUIS COUNTY MEDICAL SOCIETY.

#### MEETING OF APRIL 11TH

Dr. W. B. Dorsett, district counsellor, attended this meeting and delivered an interesting and instructive lecture on "Extra Uterine Pregnancy and Diagnosis of Fetal Position." A vote of thanks was extended to him.

Dr. Dunnivant presented a case of Valvular Lesion of the Heart.

#### MEETING OF MAY 9TH.

The secretary read a communication from the relief committee of the American Medical Association appealing for donations and contributions to the fund being raised for the relief of the stricken physicians of San Francisco. An appropriation of \$20.00 was authorized to be paid

from the general fund of this society.

Dr. M. W. Clair, of Ballwin, and Dr. R. W. Mills of Webster were

elected members. Dr. John Pitman gave an interesting talk upon injuries of the head.

R. D. MOORE, M.D. Reporter.

## BOOK REVIEWS

*Topography of the Thorax and Abdomen*, by Peter Potter, A.M., M.D., Associate Professor of Anatomy of the St. Louis University, sometime Instructor in Anatomy University of Missouri. Published by the University of Missouri. \$1.75.

The object of this volume is to give in detail some observations upon the interrelations of the organs as found in a single body. For this purpose a body has been studied by the method of sections with reference to the more important thoracic and abdominal organs and systems which are described individually, giving in each case the topography of the part, its relation to the surrounding structures, and a comparison with the literature of the subject.

The sections upon which the observations of this work are based were from the body of a well developed adult with no external signs of abnormal or pathological conditions. The trunk was cut into twenty-five cross-sections. As each section was made the loose pieces and parts liable to be displaced were stitched in place with needle and thread. While every part was yet in its normal position, a drawing was made of each section by placing a thin plate

of glass on its upper surface and tracing the outline of the parts with a fine pen and India ink. This tracing was then transferred to paper by placing the sheet on the glass over the drawing, holding them up to the light and retracing the outline on the paper. The parts in each drawing are carefully lettered and named. The nomenclature adopted by the German Anatomical Society at its meeting in Basel, 1895, (B. N. A.) is used. Besides the twenty-five plates representing the twenty-five sections there are ten additional plates in colors showing the relation of the organs as projected on the lateral surfaces of the body, also projections of the various internal organs upon the surface of the body reduced to one-half life-size. The work is prefaced with an interesting resume of the work done on this subject by various anatomists from the time of Vesalius (1555) to the present day. To the students of anatomy the observations set forth in this volume are intensely interesting; it is the most replete of its kind, and is the result of years of hard study, close observation and careful dissection.

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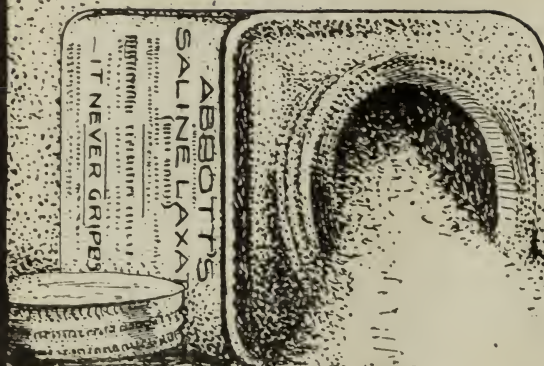
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